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Zonotrichia leucophrys

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R.C. Banks

Catalogue

1955- 1957

nos. 1 - 275

Banks, R.C.
1955

1.

25 Sept. $\frac{1}{2}$ mi. S. Kehoe Ranch 25 \pm ft 4.5 mi W 3.75 mi N. Inverness Marin Co., Calif.

1. ♂ *Peromyscus maniculatus* 170-73-21-18 19 gm
(?)
2. ♂ " " 169-79-21-13 18.7 gm

15 Oct. 4.7 road mi. N. Truckee 5700 \pm ft. on Rt. 89 Nevada Co., Calif.

3. ♂ *Peromyscus maniculatus* 144-56-18-17 15.5 gm.
4. ♀ " " 161-69-21-18 21.0 gm
5. ♂ " " 140-55-19-16 14.4 gm

15 Oct. 10.8 road mi. N. Truckee 6450 \pm ft on Rt. 89 Sierra Co., Calif.

6. ♂ *Eutamias amoenus* 186-77-30-16

16 Oct. 2.5 road mi. N. Truckee on Rt. 89 Nevada Co., Calif.

7. ♀ *Citellus lateralis* 251-73-40-19

(DOR in Sage Brush - Ponderosa Pine area - no skull)

16 Oct. 10.8 road mi. N. Truckee 6450 \pm ft. on Rt. 89, Sierra Co., Calif.

8. ♂ *Peromyscus maniculatus* 149-68-19-17 17.2 gm.

16 Oct. 3 mi. N. 3 mi. W. Hobart Mills 6500 \pm ft Nevada Co., Calif.

9. ♂ *Neotoma cinerea* 379-159-38-33 334.1 gm.
- (Prep. by S.B. Benson)

16 Oct. 4.7 road mi. N. Truckee on Rt. 89 5700 \pm ft Nevada Co., Calif.

10. ♀ *Perognathus parvus* 172-91-21-9 16.1 gm.

23 Oct. Hall Rd. 1 mi. S. 1 mi. E. Orinda ^{7000 \pm ft} Contra Costa Co., Calif.

11. ♂ *Peromyscus truei* 205-105-22-21
12. ♂ *Reithrodontomys megalotis* 143-71-14-14

Banks, R.C.
1955

2.

29 Oct. Hall Rd. 1 mi. S. 1 mi. E. Orinda 700± ft Contra Costa Co. Calif.

13. ♂ *Mus musculus* 153-75-17-14
14. ♂ " " 161-80-18-14
15. ♂ *Reithrodontomys megalotis* 133-66-17-13
16. ♂ " " 127-63-15-13

30 Oct. 3.5 mi. N. Orinda 700± ft. Contra Costa Co. Calif.

17. ♂ *Perognathus californicus* 188-96-23-11
18. ♂ *Peromyscus truei* 189-92-22-21

31 Oct. 3.5 mi. N. Orinda 700± ft. Contra Costa Co. Calif.

19. ♂ *Reithrodontomys megalotis* 131-68-16-14

5 Nov. 3.5 mi. N. Orinda 700± ft. Contra Costa Co. Calif.

20. ♀ *Peromyscus truei* 182-90-23-21

6 Nov. 3.5 mi. N. Orinda 700± ft. Contra Costa Co. Calif.

21. ♂ *Reithrodontomys megalotis* 138-68-16-14

6 Nov. 1 mi. N. 5 mi. W. Orinda 700± ft Contra Costa Co. Calif.

22. ♂ *Didelphus virginiana* 740-285-60-60

13 Nov. Mulholland Hill 2.1 mi E. 1.1 mi S. Orinda 1150± ft. Contra Costa Co. Calif.

23. ♀ *Microtus californicus* 147-40-20-15
24. ♂ *Peromyscus truei* 192-94-23-21
25. ♀ " " 199-93-20-23
26. ♂ " " 169-82-20-20

Banks, R.C.
1955

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19 Nov. Mulholland Hill 2.1 mi E. 1.1 mi S. Orinda 1150± ft Contra Costa Co. Calif.

- 27 ♀ *Sorex trowbridgei* ^{no} embryos 105-49-12-5
28 ♂ *Peromyscus truei* 199-95-24-23
29 ♂ " " 179-80-23-21
30 ♀ " " 178-86-21-21
31 ♂ " " 176-84-23-21
32 ♂ *Reithrodontomys megalotis* 145-73-16-14

20 Nov. Mulholland Hill 2.1 mi E. 1.1 mi S. Orinda 1150± ft Contra Costa Co. Calif.

- 33 ♂ *Microtus californicus* 168-43-21-15
34 ♂ *Peromyscus truei* 195-95-24-23

25 Nov. Approx. 2 mi. N. Pleasanton Alameda Co. Calif.

- 35 ♂ *Microtus californicus* 172-42-20-15
36 ♀ *Mus musculus* 162-75-17-14
Enlarged mammary glands
No embryos Placental scars (?)

18 Dec. 1.8 mi S. 1 mi E. Orinda 700-800 ft. Contra Costa Co. Calif.

- 37 ♀ *Sorex trowbridgei* ^{no embryos} 116-48-14-5
38 ♂ *Peromyscus californicus* 228-120-26-25
39 ♂ *Peromyscus truei* 190-94-25-20
40 ♀ *Peromyscus maniculatus* ^{no embryos} 168-78-20-17
41 ♂ *Reithrodontomys megalotis* 148-74-17-15

19 Dec. 1.8 mi S. 1 mi E. Orinda 700-800 ft. Contra Costa Co. Calif.

- 42 ♀ *Microtus californicus* ^{no embryos} 152-43-20-15
43 ♂ *Microtus californicus* 153-43-20-16
44 ♂ *Peromyscus truei* 193 94-23-22
45 ♀ " 199-101-25-22

Banks, R.C.
1955-6

4.

28 Dec. Oakland, Sherwick + Bristol Dr. 1025±ft. Alameda Co. Calif.

46 ♂	<i>Peromyscus californicus</i>	242-123-26-25
47 ♀	"	242-125-28-25
48 ♂	"	228-123-28-24

1956

24 Jan. Oakland, Buckingham Blvd. + Bristol Dr. 100±ft Alameda Co. Calif.

49 ♀	<i>Peromyscus californicus</i>	248-122-26-25
50 ♀	<i>Peromyscus truei</i>	202-100-24-19
51 ♂	"	195-93-23-20

4 Feb. 1.8 mi S, 1 mi E. Orinda, 750±ft Contra Costa Co., Calif.

52. ♂	<i>Peromyscus truei</i>	194-94-24-22
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11 Feb. 1.8 mi. S, 1 mi E. Orinda, 750±ft, Contra Costa Co., Calif.

53. ♀	<i>Thomomys bottae</i>	213-60-25.-
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26 Feb. 2.1 mi W, 6 mi N. Orinda Village, 920±ft Contra Costa Co., Calif.

54.	<i>Triturus torosus</i>	
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55.	"	"
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56.	<i>Ensatina eschscholtzii</i>	
-----	-------------------------------	--

57.	"	"
-----	---	---

58.

59	<i>Batrachoseps</i>	
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60	"	
----	---	--

61	"	
----	---	--

62	"	
----	---	--

63	"	
----	---	--

Ban K₃, E.C.
1956

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Catalogue

20 Mar. Sagehen Creek Exp. Sta., 6550±ft, Nevada Co., Calif.

25 Mar 56
on
labels

64. ♂ <i>Peromyscus maniculatus</i>	- , 67, 20, 13	Caught & gutted 25 Mar 1956
65. o?	- , 37, 12, -	"
66. ♀ <i>Microtus</i>	- , ' , ' ,	"

31 Mar. 1.8 mi S, 1 mi E Orinda, 750±ft, Contra Costa Co., Calif.

67. <i>Peromyscus maniculatus</i>	135, 60, 19, 16
68. " "	151, 62, 20, 16
69. " truei	203, 100, 23, 23
70.	
71.	
72.	

73. *Passerella iliaca* - wings only

7 Apr. 3.4 E Stinson Beach, Pt. 12, Marin Co., Calif.

74. *Glaucidium gnoma* wings only.

22 Apr. Big Basin State Park 900±ft Santa Cruz Co., Calif.

75. ♂ <i>Peromyscus californicus</i>	243-127-27-25
76. ♂ " "	252-137-27-25
77. ♀ " "	265-139-25-26
78. o? " truei	203-101-24-24
79. ♂ " californicus	253-135-27-24
80. o? " truei	229-118-23-24
81. o? " "	205-105-23-23
82. ♂ " "	218-113-23-23
83. o? " californicus	261-139-25-25

28 Apr. Hopland Exp. Station, Mendocino Co., Calif.

84	<i>Sceloporus undulatus occidentalis</i>
85	" "
86	" "

20 May U.C. Campus, Berkeley, Alameda Co., Calif.

87. *Hylocichla ustulata* 28.0 gm frozen

21 May Alameda Co., Calif. Caged animal.

88 ♀ *Neotoma fascipes* 457-235-45-31 207.0 gm

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- 28 May 2.3 mi below summit, Mt. Diablo, ^{2650±ft} Contra Costa Co., Calif.
 89. ♀ *Citellus beecheyi* 425-145-50-28 ^{Nipples large} placental scars.
- 5 June Glacier Point, Yosemite Park, 7214 ft, Mariposa Co., Calif.
 90. ♀ *Cyanocitta stelleri* Brood patch, ova to 1.5 mm.
- 23 June Black Hills, 2.6 mi N Orinda Village, Contra Costa Co., Calif. 1020±ft
 91. ♂ *Peromyscus californicus* 227-109-25-27
 92. ♂ " " 213-111-26-24
 93. ♀ *Pipilo erythrophthalmus* ^{no fat} 38.3 gm ^{Brood Patch} ova to 2 mm.
 94. ♂? " " ^{no fat} 38.8 gm ^{Ovipositor 27 June 1957}
 95. ♂? *Thryomanes bewicki* ^{no fat} 40.5 gm.
- 24 June
 96. ♂ *Peromyscus truei* 175-80-22-20 20.4 gm
 97. ♀ " " 180-87-22-21 23.1 gm
 98. ♂ *Pipilo erythrophthalmus* ^{Ovipositor 39 June 1957} ad. 40.0 gm. ^{no fat} Tes. 7 mm.
 99. ♂ " ^{Ovipositor 27 June 1957} " 39.6 gm. ^{no fat}
 100. ♂ *Thryomanes bewicki* ^{Ovipositor 27 June 1957} Testes 1 mm ^{no fat}
 101. ♂ *Parus inornatus* ^{Ovipositor 27 June 1957} ad. Testes 1 mm ^{no fat}
 102. ♂ *Chamaea fasciata* ^{Ovipositor 27 June 1957} testes 4 mm ^{thin skull} ^{no fat}
- 7 July
 103. ♂ *Peromyscus* ^{Testes 7x4 mm} 178-88-22-20 21.9 gm.
 104. ♂ *Neotoma fuscipes* 378-183-42-28 182.3 gm
 105. ♀ *Pipilo fuscus* ad. brood patch ova to 1 mm. 53.2 gm.
- 8 July
 106. ♂ *Peromyscus truei* 192-95-21-21 26.5 gm. ^{no embryos}
 107. ♀ " *californicus* 212-105-24-25 30.2 gm.
- 13 July
 108. *Peromyscus* skull + hindfoot only
- 14 July
 109. ♀ *Pipilo erythrophthalmus* ^{no fat} ad. ova to 1 mm. 40.5 gm
 110. ♀ *Neotoma fuscipes* 392-202-41-28 ^{no emb} ^{no fat} 21.2 gm.
 111. ♀ " " 403-199-40-29 ^{no emb} 245.7 gm
 112. ♂ *Peromyscus truei* 193-94-22-22 21.7 gm
 113. ♀ " " 189-99-21-20 21.1 gm
 114. ♂ ~~" " 239-122-26-26 42.8 gm~~

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7.

Black Hills, 2.6 mi. N. Orinda Village, ^{1020±}_{1000±} ft., Contra Costa Co., Calif.

14 July

- 114 ♀ *Peromyscus californicus* 2 placental scars Flat skin.
258-126-26-25 43.1 gm
115 ♀ " truei (?) 5 large embryos.
not measured 35.0 gm
116 ♂ *Toxostoma redivivum* Testes large 88.3 gm.

15 July

- 117 ♂ *Thryomanes bewickii* imm (sh) ^{disc. 29 Jun 1957}
118 ♀ *Neotoma fuscipes* imm. no emb. 329-168-38-29 124.5 gm.
119 ♂ " " 439-215-42-30 329.9 gm
120 ♂ *Peromyscus* 191-89-26-22 23.1 gm.

Mudland Hill, 2.1 mi. E, 1.1 mi. S. Orinda, 1150± ft. Contra Costa Co., Calif.

24 July

- 121 ♂ *Perognathus* 119-107-26-12 27.0 gm.
122 ♀ *Peromyscus truei* 5 embryos 9 mm. no emb. highly developed.
212-103-23-23 34.3 gm.

5 mi. E. Panoche, San Benito Co., Calif.

15 Sept. 56

123. ♂ *Sayornis saya* Coll. F.J. Radovsky
Testes small - fresh plumage

Pt. Reyes, Marin Co., Calif.

30 Sept. 56

124. ♀ *Peromyscus maniculatus* 155-73-21-16 no emb.
125. ♀ " " 162-76-21-16 no emb.
126. ♀ " " 163-72-20-18 no emb.
127. ♀? *Passerculus sandwichensis* 29.5 gm.

Black Hills, 2.6 mi. N. Orinda Village, 1020±, Contra Costa Co., Calif.

14 Oct. 1956

- 128 ♂? *Junco* juv (sh) ^{disc. 29 Jun 1957}
129 ♀ *Zonotrichia coronata* very fat
130 ♀ *Pipilo erythrophthalmus* 1st y. 42.2 gm.

4 mi. NE. Richmond, 300± ft. Contra Costa Co., Calif.

- 130 Oct. 131. ♂ *Passerculus sandwichensis* 18.1 gm. Coll. R.J. Raitt
imm.

Banks
1956

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Corral Hollow, 700 ± ft., Alameda Co., Calif

20 Oct. 1956

132. Bufo

133. Bufo

21 Oct.

134 ♂ Dipodomys

135. ♀ Perognathus ~~parvus~~ ^{inornatus}

282-173-40-13 53.7 gm.

Tail Broken Two Places
129- 58-18-7 11.6 gm.

San Joaquin Co. { 136. ♂ Dendrocopus nuttallii imm sk. 38.3 gm.
137. ♂ Carpodacus mexicanus ad. sk. mod. fat. 21.5 gm.

Note: 136 + 137 in San Joaquin Co.

Berkeley, Alameda Co., Calif

1 Nov. 1956

138. ♂ Dendroica auduboni

found dead by W.J. Mather

imm sk. mod. fat

1.8 mi S, 1 mi E. Orinda, 750⁺ ft. Contra Costa Co., Calif

22 Nov. 1956

139. ♂ Junco oreganus

ad. sk. Test. 1 mm. 17.9 gm.

140. ♂? Parus inornatus

ad sk. gonads
shd

14.7 gm.

141. ♂? Sphyrapicus varius

juv sk. "

37.7 gm.

~~142. Parus inornatus~~

~~15.8 gm.~~

142. ♂ Sitta carolinensis

ad sk.

27.5 gm.

Alameda, Alameda Co., Calif.

6 Dec. 1956

143. ♂ Dendroica auduboni

imm. sk. lt. fat

rec'd from J. Kelly 11.0 gm.

Approx 5 mi S. Woodland

Co., Calif

1 Dec. 1956

144. ♀ Balanosphyna formicivora DDR. imm sk.

Grey Lodge Waterfowl Refuge, Butte Co., Calif.

2 Dec. 1956

145. ♀ Erolia minutella

found dead by A.H. Miller.

146. ♂ Anas strepera

found dead skel.

1.8 mi S, 1 mi E. Orinda, 700 ±, Contra Costa Co., Calif

24 Dec. 1956

147. ♂ Ixoreus naevius

77.0 gm. skull only

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1957

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Berkeley, Calif. Alameda Co.

5 Jan

148. ♂ *Dendroica auduboni* wings + skull only
found dead by R.G. Aldridge

23

23 Jan 1957

Badlands 1 mi E. Jct. 60+79, 1850± ft. Riverside Co., Calif.

149. ♂ *Peromyscus californicus* 240-129-29-24 ^{testes 7 mm} 34.7 gm.

S. Side Mt. Russell, 1850± ft. Riverside Co., Calif.

150. ♂ *Neotoma* ^{testes 19x11} 297-138-33-29 ^{128.3} gm.

151. ♂ *Dipodomys* 294-173-42-17 59.1 gm.

~~St. George Mt. Russell, 1850± ft. Riverside Co., Calif.~~

~~152. *Atimophila ruficeps* 25.7 gm.~~

152. ♀ *Peromyscus* no embryos. 198-107-20-18 24.7 gm.

153. ♀ *Peromyscus* no embryos 197-109-20-21 19.7 gm.

154. ♂ " 205-111-20-19 22.0 gm.

155. ♂ " 152-65-19-17 17.3 gm.

24 Jan 1957

156 ♀ *Dipodomys* no embryos 289-169-41-18 56.7 gm.

157 ♀ *Perognathus* no embryos 190-102-23-10 19.8 gm.

158 ♀ *Neotoma* ^{SOMETHING in each uterus (?)} 386-181-36-32 203.5 gm.

Badlands, 1 mi. E. Jct. 60+79, 1850± ft. Riverside Co., Calif.

159 ♂ *Neotoma*

2 mi. NW Canebrake Canyon,

San Diego Co., Calif.

460

460.7 gm.

Mr. Egan
CR 77663

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1957

Catalogue

part
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9.

Berkeley Alameda Co., Calif.

5 Jan.

148. ♂ *Dendroica auduboni*

wings + skull only
Found dead by R. Albridge

23 Jan. 1957

Badlands, 1 mi. E. Jct. 60+79, 1850± ft., Riverside Co., Calif.

149 ♂ *Peromyscus californicus* ^{Testes 7mm.} 240-129-29-24 34.7 gm

S. Side Mt. Russell, 1850± ft., Riverside Co., Calif.

150. ♂ *Neotoma* ^{Testes 19x11} 297-138-33-29 125.3 gm

151. ♂ *Dipodomys* 294-173-42-17 59.1 gm
no embryos

152. ♀ *Peromyscus* 198-107-20-18 24.7 gm
no embryos

153. ♀ " 197-109-20-21 19.7 gm

154. ♂ " 205-111-20-19 22.0 gm

155. ♂ " 152-65-19-15 17.3 gm

24 Jan. 1957

156. ♀ *Dipodomys* ^{no embryos} 289-169-41-18 56.7 gm

157. ♀ *Perognathus* ^{no embryos} 190-102-33-10 19.8 gm

Badlands, 1 mi E. Jct. 60+79, 1850± ft., Riverside Co., Calif.

158. ♀ *Neotoma* ^{something in each horn} 386-181-36-32 50.35 gm

159. ♂ " 365-155-38-31 34.39 gm

25 Jan. 1957

1/2 mi. NW. Cane Brake Canyon, 900± ft., San Diego Co., Calif.

160. ♂ *Oreoscoptes montanus* ^{2 layers} sh. mod. fat. 40.7 gm

26 Jan. 1957

Eggers, Cane Brake Canyon, ¹²⁰⁰ ~~1300~~± ft., San Diego Co., Calif.

161. ♂ *Zonotrichia leucophrys* 2 layer skull 25.7 gm

Tres Palmas, Vallecito Valley, 900± ft., San Diego Co., Calif.

162. ♂? *Zonotrichia leucophrys* 2 layer skull 26.4 gm

163. ♂ *Phainopepla nitens* 2 layer skull 23.7 gm

164. ♂? *Sialia mexicana* 2 layer skull 33.1 gm

165. ♀ *Dendrocopus scalaris* 1 layer skull 31.1 gm

166. ♂ *Phainopepla nitens* ^{L. testes 3mm.} sh. part 2 layer 21.9 gm

Eggers, Cane Brake Canyon, 1200± ft., San Diego Co., Calif.

167. ♂ *Zonotrichia leucophrys* 25.9 gm

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27 Jan 1957

Vallecito Valley, mouth of Cone Brahe Canyon, 900± ft., S.D. Co., Calif.

168. ♀ *Thomomys bottae* 228-72-28-6 91.7 gm.

Eggers, Cone Brahe Canyon, 1200± ft., San Diego Co., Calif.

169. ♂ *Melospiza lincolnii* 2-layer skull, 15.0 gm

28 Jan 1957

170. ♂ *Thomomys bottae* 226-56-32-8 196.0 gm.

171. ♂ *Oreoscoptes montanus* ad sh. 42.5 gm.

Tres Palmas Vallecito Valley, 900± ft. San Diego Co., Calif.

Eggers, Cone Brahe Canyon, 1200± ft., San Diego Co., Calif.

172. ♀ *Amphispiza nevadensis* ad sh. 16.0 gm.

173. ♂ *Carpodacus mexicanus* ad sh. Testes 2.5 mm. 21.5 gm.

1 Feb. 1957

Berkeley Alameda Co., Calif.

174. ♀ *Buteo jamaicensis* ad. no fat.

7 April 1957

U.C. Campus, Berkeley Alameda Co., Calif.

175. ♂? *Zonotrichia l. nuttallii*. nestling, from Nest B, 1957. 8 days when removed from nest, approx. 7 3/4 day when died. Presumably died from exposure. Alcoholic, with skull tag only. wt. 15.6 gm.

13 April 1957

176. ♂? *Zonotrichia l. nuttallii* nestling - at hatching time, from Nest G, 1957. partly in shell (back end) when taken. Alcoholic with skull tag only. Age - 0. wt. 2.1 gm.

16 April 1957

177. ♂? *Zonotrichia l. nuttallii* nestling - age 1 day, alcoholic, skull tag only, from Nest C, 1957. wt. 2.6 gm. died overnight

18 April 1957

178. ♂? *Zonotrichia l. nuttallii* nestling - age 2 1/2 days, alcoholic - skull tag only, from nest C, 1957. wt. 5.9 gm. died overnight. formerly marked R-3

179. ♂? *Z. l. nuttallii* nestling age 2 1/2 days, alcoholic, skull tag only, from nest C, 1957. wt. 6.9 gm. died overnight. formerly R-1

180. ♂? *Z. l. nuttallii* nestling - age 2 1/2 days, alcoholic, skull tag only, from nest C, 1957. wt. 5.9 gm. died overnight. formerly L-3. abdomen broken.

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11.

18 April 1957

1.8 mi S, 1 mi. E, Orinda, 750 ft., Contra Costa Co., Calif.

181. ♂ *Vireo gilvus* 10.8 gm. L.Tes. 6 mm.
182. ♀ *Sialia mexicana* ^{in refrigerator} overnight. 26.7 gm. ^{ovary small} longest ovum 4 mm.

22 April 1957.

Inside Edwards Field, U.C. Campus, Berkeley, Calif.

183. ♂? *Zonotrichia l. nuttallii* nestling - alcoholic.
Age - $7\frac{1}{2}$ days +
R-3 of Nest G, 1957 skull tag only. wt. 14.3 gm.

25 April.

(Near) Moraga, Contra Costa Co., Calif.

184. ♂ *Bubo virginiana* 978 gm. L.Tes. 9 mm. D.R. Found by S. Herman
Put up 27 Apr. brought to me by R. Rickman

30 April.

U.C. Campus, Berkeley, Alameda Co.

185. ♂? *Zonotrichia l. nuttallii* nestling 9 days. - alcoholic.
21.7 gm. R-1 of Nest H, 1957
186. ♂? " " " nestling 9 days - alcoholic
17.7 gm. R-4 of Nest H, 1957
187. ♂? " " " nestling $8\frac{1}{2}$ days - alcoholic
19.3 gm. R-1 of Nest H, 1957.

2 May

188. ♂? *Melospiza melodia* nestling 9 days. alcoholic.
16.2 gm. R-1 of Nest W, 1957.
189. ♂? *Pipilo erythrophthalmus* nestling, $2\frac{1}{2}$ days alcoholic
13.1 gm. Nest A, 1957.

6 May

190. ♂? *Zonotrichia l. nuttallii* nestling 5 days alcoholic.
14.4 gm. L-3 Nest K, 1957
191. ♂? " " " nestling age? alcoholic
19.1 gm. Nest N, 1957.
192. ♂? *Pipilo erythrophthalmus* nestling 6 days alcoholic
22.5 gm. Nest A, 1957.

10 May

193. ♂? *Turdus migratorius* nestling - alcoholic, 39.7 gm.
found dead in nest by A.B.
~~194. ♂? *Zonotrichia l. nuttallii*~~
194. ♂? *Melospiza melodia* nestling - alcoholic. ut.?
 $4\frac{1}{4}$ days. R-1 of Nest T.

11 May

195. ♂? *Zonotrichia l. nuttallii* nestling - alcoholic.
 $2-2\frac{1}{2}$ days R-3 of Nest M.
196. ♂? " " " nestling - alcoholic. $3\frac{1}{2}$ days
R-1 of Nest M 8.6 gm.

20 May

197. ♂? *Zonotrichia l. nuttallii* nestling - alcoholic approx
L-3 of Nest P. $2\frac{1}{2}$ days. 4.2 gm.

28 May

198. ♂? *Zonotrichia l. nuttallii* nestling - alcoholic.
12.7 gm. 5 days
199. ♂? " " " nestling - alcoholic.
13.8 gm. $4\frac{1}{2}$ - 5 days.

Banks
1957

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5 May 1957

Silver Canyon, 5 mi ENE. Bishop, 4600 ft., Inyo Co., Calif.
^{SREL} 200, ♂ *Chloroeca chloroeca* 27.4 gm. L. Testis 5 mm.
coll. W.W. Dummie, frozen till 3 June 1957.

24 May

black,
not dev.

Uma St., 2300±, Berkeley, Alameda Co., Calif.
201, ♂ *Piranga ludoviciana* 29.7 gm. very fat ad.
Found by Ruth A., recy. in M.V.2.

7 June

U.C. Campus, Berkeley, Alameda Co., Calif.
202 ♂. *Zonotrichia l. nuttalli* alcoholic. 4 days 10.7 gm. Nest 5
203 ♂. " " " alcoholic 4 days 11.1 gm. Nest 5
204 ♂. *Melospiza melodia* alcoholic 5 1/2 days. 7 days. 13.4 gm. Nest 2
205 ♂. " " " alcoholic 6 1/2 days. 14.7 gm. nestling.

8 June

5 mi S, 9 mi E. Lee Vining, Mono Craters, Mono Co., Calif.
206, ♂? *Asio otus* ^{old brood} patch. coll. N. Johnson
207, ♀ *Contopus richardsoni* ovary small. 13.2 gm.

10 June

4 mi. N. Indian Spring, 7500± ft., Esmeralda Co., Nev.
208, ♂ *Dendroica nigrescens* 8.9 gm. Tes. 7 mm.
209 ♂ *Spizella passerina* 12.2 gm. Tes 8 mm
210 ♂ *Empidonax* ^{gray flycatcher.} *griseus* 13.1 gm. Tes. 6 mm.
211 ♀ *Psaltriparus minima* Brood patch 6x4 mm.
212, ♂ *Thryomanes bewickii* juv.
213, ♂ " " "

11 June

Indian Spring, 7300 ft., Esmeralda Co., Nevada
214, ♀ *Dendroica nigrescens* 2 empty follicles ^{Brood} patch
215, ♀ *Spizella breweri* incubating 3; ^{1 egg in} ^{oviduct.}
216 ♂ *Psaltriparus minima* Tes. 5 mm.
217, ♂ *Myiarchus cinerascens* Tes. 11x5 mm.
218 *Scolecophorus*
219 ♂ *Carpodacus mexicanus* Tes. 5 mm.

12 June

Indian Spring N. side Mt. Mansfield, 7300 ft., Esmeralda Co., Nev.220, ♂ *Chlorura chlorura* Tes. 12 mm.1/2 mi. S. Pigeon Spring, 6400 ft., Esmeralda Co., Nevada221, ♂ *Amphispiza bilineata* 13.7 gm. Tes. 6 mm.222, ♂ *Parus inornatus* juv.223, ♂ *Spizella breweri* 10.1 gm. Test. large.

224, ♂ " " 10.5 gm. Tes. 6 mm.

13 June

Queen Canyon, 7000 ft., Mineral Co., Nevada225, ♂ *Oporornis tolmiei* 10.2 gm. Tes. 6 mm.226, ♂ *Cyanocitta stelleri* Tes. 5 mm. ad.

227, " " "

228, ♂ *Vireo gilvus* Tes. 6 mm.229, ♂ *Amphispiza belli* Tes. 8 mm. fat.

14 June

Mouth Sweetwater Canyon, 7300 ± ft., Lyon Co., Nevada230, ♀ *Carpodacus cassinii* 34.2 gm. leggin oviduct ^{Brood patch}

231, ♂ " " 29.0 gm. Tes. 7 mm.

232, ♂ *Eutamias* 184-79-27-13 30.0 gm. ^{Brood patch.}233 ♀ *Pipilo erythrophthalmus* ova to 8 mm, not ovulated.234, ♀ *Piranga ludoviciana* 31 gm. ova 3 mm.235, ♂ *Parus gambelli* Tes. 6 mm. 11.2 gm.

236, ♂ " " 10.3 gm. Tes. 2.5 mm. ad. sk.

237, ♂ *Psaltiriparus minima* 6.2 gm.238, ♀ *Spinus pinus* 15.2 gm. ^{largest ovum 1.5 mm.} Brood patch very fat239, ♂ *Carpodacus cassinii* 26.9 gm. Tes. 8 mm.240, ♂ *Eutamias* 177-79-25-16 27.7 gm

Zach
1957

Catalog

Date?

Hopland Field Station, Mendocino Co., Calif.241, ♂ *Dendroica nigrescens*, imm, skull. ^{Coll. u.} Longest 9.1 gm.

9 July 1957

So. Pasture, Hopland Field Station, Mendocino Co., Calif. 700±ft.242, ♂? *Thalassina tachycneta* ad sk. Coll. C. Thaler

1 Aug. 1957

Forter Pasture, Hopland Field Sta., 950±ft., Mendocino Co., Calif.243, ♂ *Balanosphyra formicivora* coll. O. Burris Test. 6 mm, 91.5 gm.

26 June 1957

Lakefield Pasture, Hopland Field Sta., 900±ft. Mendocino Co., Calif.244, ♂ *Contopus richardsoni* ^{ad.} Coll. C. Thaler Test. 7 mm. 13.3 gm.245 ♀ *Melospiza melodia* " " Largest ovum 2 mm, 17.8 "

22 Aug.

Orchard, Hopland Field Station, ^{2800±} Mendocino Co., Calif.246 ♂ *Odocoileus* skull only, 3 yrs. old.

25 Aug.

Lake Pasture, Hopland Field Station, Mendocino Co., Calif.247, ♂ *Spirzella* ^{molting} 12.9 gm. ^{lean sk.}

4 Sept.

248, ♂? *Dendroica aestiva rubiginosa*? ^{found dead W.E. Ferguson.} 11.6 gm. Very fat.U.C. Campus, Berkeley, Alameda Co., Calif.

14 June

~~249.~~

6000 ft.

249, ♂ *Nuttallornis borealis* DOR. 32.0 gm.~~250. ♂ *Citellus*~~

15 June

Berkeley Hills, Contra Costa Co., Calif.251, ♂ *Aphelocoma* ^{coerulescens,} ~~californica~~ 75.8 gm. imm.

Catalog

15,

Sept.

15 ~~June~~, 19571. 8 mi S, 1 mi E. Orinda, 750 ± ft., Contra Costa Co., Calif.252. ♂ *Vireo huttoni* 11.6 gm. imm (sh.)253. ♂ *Spinus psaltria* 9.5 gm. imm (sh.) slightly fat.254. ♂ *Thryomanes bewickii* 11.0 gm.

12 Oct. 1957

Grocker ~~Guard~~ Sta., 5 mi N, 2 1/2 mi W. Berkeley, 5760 ± ft., ^{Plumas} Co., Calif.255. ♂ *Dendrocopos albolarvatus* 58.2 gm. no fat. Tes. 8 x 3 mm.256. ♀ *Cyanocitta stelleri* 106.2 gm. no fat. ad.

20 Nov. 1957

atherton St., Berkeley, Alameda Co., Calif.257. ♂ *Dendroica auduboni* 11.2 gm. found dead imm.

21 Dec. 1957

2. 8 mi WNW Richmond, 1275 ± ft., Jefferson Co., Ohio258. ♂ *Dendrocopos pubescens* Tes. 2 mm. no fat. ^{skull not} ossified.259. ♀ *Parus* fat, ad.

260. ♂ " fat, ad.

2. 1 mi WNW Steubenville (Post Office) 1180 ft. Jefferson Co., Ohio261. ♂ *Peromyscus leucopus* 162-73-20-16 Tes. 6 mm262. ♀ " " 147-54-20-17 Tail broken off
no embryos~~263~~ 23 Dec. 1957 1150 ± ft.263. ♀ *Parus carolinensis* 10.0 gm. ^{skull ossified.} slight fat264. ♂ *Peromyscus leucopus* 103-19-21-16 ~~189~~ 19.2 gm. ^{Tail broken off.} no emb.

265. ♀ " " 177-77-21-17 21.0 gm. fat.

27 Dec. 1957

202 Wilma Ave., Steubenville, Jefferson Co., Ohio, ± ft.266 ♀ *Blarina brevicauda* 109-25-15- - 17.4 gm. coll. C. S. Banks

28 Dec. 1957

267 ♂ *Procyon lotor* skull and baculum only - pick-up.268 o? *Didelphis virginiana* skull only pick-up by C. S. B.Approx. 3 mi. WNW Richmond, 1300 ± ft., Jefferson Co., Ohio.{ locality for *Procyon*.

{ Jefferson Lake, 1100 ± ft., Jefferson Co., Ohio.

{ locality for *Didelphis*.

Banks
1957

Catalog.

16

30 Dec. 1957

2.1 mi WNW Steubenville (Post Office) 1150±ft., Jefferson Co., Ohio.

269. ♂ *Peromyscus leucopus* 159-70-20-17 19.4 gm. Tes. 5 mm.

31 Dec. 1957

270. ♂ *Peromyscus* 181-82-22-18 24.2 gm.

2 mi W Pikes Peak, Pikes Mt., 7000 ft., Ventura Co., Calif.

~~271.~~

29 Dec. 1957

271. ♂ *Cyanocitta stelleri* 114 gm. coll. R. R. Runt. ad. Tes. 3 mm.

12 Oct. 1957

Crocker Guard Sta., 5 mi N, 2½ mi. W. Beckwouth, 5760±ft., Plumas Co., Calif.

272. ♂ *Carpodacus cassinii* 28.3 gm. testes minute, ^{skull} partly 2 layers

273. ♂ " " 30.3 gm. " " skull 1 layer.

274. ♂? *Sialia currucoides* 30.5 gm. ad (sk.) fat. ^{molt on} head

275. ♂ " " 33.3 gm. ad. (sh.) some fat. ^{tes 3 mm} black

R. C. Banks
Journal

Oct. 14, 1955

to

Dec. 31, 1957

Banks, R.C.
1955.

1

14-16 October.

Arrived Sage Hen Creek Area 1930 hrs. 14 Oct. with Joe Brooks and John Ondrias. Set 2 dozen museum specials and 3 rat traps in Sage Brush 4.7 road miles N. Truckee, at 5700 \pm ft. on Rt. 89, Nevada Co., Calif., Eastside of road. (Area A.) Traps were approx. 5 paces apart in rough triangle. Set 11 museum specials, 1 rat trap in small meadow (Area B) 8.3 road miles N. Truckee on Rt. 89, 6250 \pm ft., east side of road, approx. 15 ft. apart. Set 7 mus. sp., 2 rat traps 10.8 road mi. N. Truckee, Sierra Co., 6450 \pm ft., west side of Rt. 89, north of junction of Sage Hen Creek Rd. in pine-fir area. (Area C)

15 Oct. found 13 *Peromyscus maniculatus* in area A, 5 σ , 8 ϕ . Found 1 σ , 1 ϕ *Peromyscus maniculatus* in Area C. Set 6 rat traps in Area D, 1.1 mi. from Rt. 89 on Sage Hen Creek Rd., 6500 \pm ft. Area D very rocky, along road edge of Pine woods. Very shortly got 1 σ *Eutamias amoenus*, 1 σ *Citellus lateralis*. Later set 13 more traps in Area D. Caught 2 σ *Eutamias amoenus* in Area C. Set 6 gopher traps, 2 mole traps, 1 rat trap, 16 mus. sp. in Area E, a wet meadow along Creek, 2.5 mi. N., 2 mi. W. Hobart Mills, 6225 \pm ft. Traps from area B put into area E.

On 16 Oct. found 3 σ 3 ϕ *Peromyscus maniculatus* and 1 ϕ *Perognathus parvus* in area A. Found 1 σ *Eutamias amoenus*, 1 σ *Citellus lateralis*, 1 σ *Neotoma*

Banks, R.C.
1955

14-16 Oct. cont'd.

2.

cinerea, 1 ♂ *Peromyscus maniculatus* in area D.

Nothing in areas C or E. Started home about 1045 hrs.

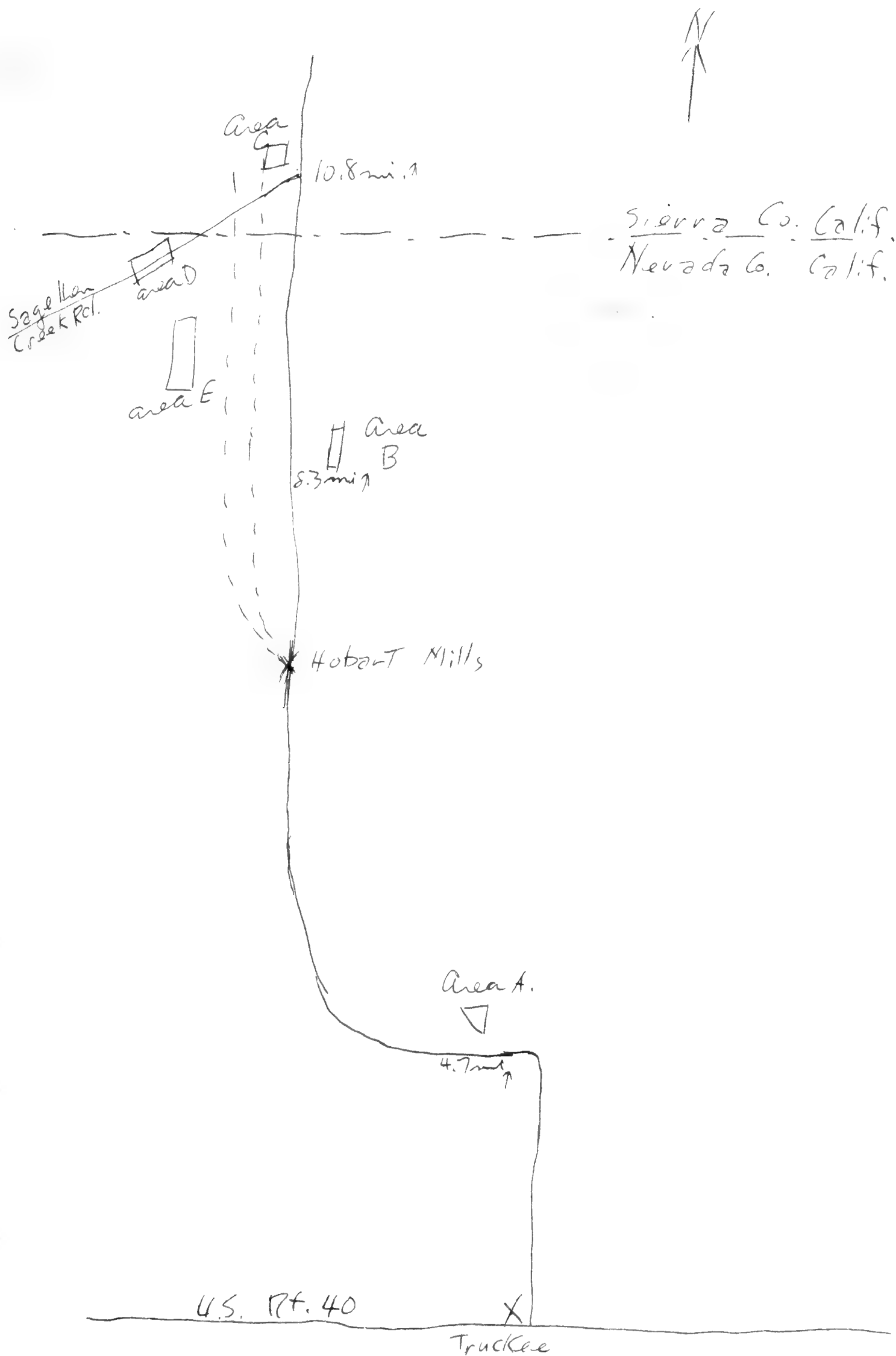
Found ♀ *Citellus lateralis* DOR. 2.5 mi. N. Truckee on RT. 89 in Sagebrush-Ponderosa Pine area. Skull badly crushed. Made skin (RCB 7), no skull. Also prepared did ♂ *Peromyscus maniculatus* from area D. (RCB 8). Over weekend also did 3 *Peromyscus maniculatus* from area A. (RCB 3, 4, 5) and ♂ *Eutamias amoenus* from area C. (RCB 6).

On 17 Oct. did *Perognathus*, (RCB 10). W. Benson did *Neotoma* (RCB 9). Over weekend Joe Brooks prepared 3 *Peromyscus maniculatus*, 1 *Citellus lateralis*, 1 *Eutamias amoenus*. John Andrews did 2 *Eutamias amoenus*, 2 *Peromyscus maniculatus*, 1 *Citellus lateralis*.

Banks, R.C.
1955

14-16 Oct. cont'd.

3,



Banks, R.C.
1955

4.

21-23 Oct.

About 1700 hrs. J. Schnell + I set traps 1 mi S. 1 mi E. Orinda, on Hall Rd., Contra Costa Co., Calif. Set 12 mus. sp. in grassy field, 13 mus. sp., 5 rat traps in wooded ravine. Both areas looked like excellent habitats. Checks Sat (22 Oct.) AM + PM found all traps empty, the most in the field had been sprung. In PM moved all traps in field closer to area where thistles (?) were growing, and where some trash had been dumped.

Sun. (23 Oct.) A.M. found 1 ♂ *Peromyscus truei* (RCB 11) in woods. In field, had 6 ♂ *Reithrodontomys megalotis*, most very small. Put up 1 as (RCB 12) Others were:

12 RCB - 143-71-14-14

not saved. { 161-74-16-13
121-59-14-12
130-65-17--
113-59-15-12
135-70-16-13

1955

28-31 Oct.

J. Schnell + I set 10 mus. sp. 1 rat trap 1 mi S. 1 mi E. Orinda, 700± ft., Contra Costa Co., Calif., in field near thistles. Set 15 mus. sp. 4 rat traps in woods.

Sat (29 Oct.) AM. had 4 ♂ *Mus musculus*, 3 ♂ *Reithrodontomys megalotis* in field. Put up 2 *Mus*, 2 *Reithrodontomys*. (RCB. 13, 14, 15, 16.) Schnell did 1 *Reithrodontomys*. Other *Mus* measured 133-62-16-12 and 121-63-17-10.

The *Reithrodontomys* were at first believed to be some *Peromyscus*. The grooved upper incisors escaped notice. Ones caught last week were identified now. The *Reithrodontomys* were similar in color to *Mus*, but were lighter below and had 2-tone tail. Hair on inside of ear is heavier + mustier than in *Mus*. There is also a lighter area on flank and a darker streak on the back in *Reithrodontomys*, which is lacking in *Mus*.

No. RCB 12-16 were all caught in a line of about 50 yds. where a field of 10"-15" high thick grass joined an area of dead thistle or other composite. Walnut meat was used as bait. All specimens were caught at night.

Banks, R.C.
1955

28-31 Oct. cont'd.

6.

On the evening of 29 Oct. all traps were moved but 1 mus. sp. which was lost. 5 rat traps set in Priole Valley, Contra Costa Co., where we had seen a colony of Beechy Ground Squirrel. 24 mus. sp. set in wooded ravine + brushy field $3\frac{1}{2}$ mi. N. Orinda 700 \pm ft. near Hampton Rd. (?) in Contra Costa Co. All sets made just before dark.

Sun. A.M. had 1 ♂ *Peromyscus truei* and 1 ♂ *Perognathus californicus*, no ground squirrels. Put these 2 up as RCB 17+18. In P.M. moved rat traps to area of mus. sp., near 2 wood rat houses.

Mon. A.M. (31 Oct.) had 1 ♂ *Reithrodontomys megalotis* (RCB 19). 2 rat traps sprung, 1 bloody.

Banks, R.C.
1955

7.

4-6 Nov.

Fri. PM, 4 Nov.; set 12 mus. sp. and 2 rat. traps in and around field near bottom of hillside in same area as last week, 3.5 mi. N. Orinda, 700± ft., Contra Costa Co. Set 12 mus. sp. + 2 rat traps about 200 yds. up side ravine, in and near area of dead brush. Many holes under brush, about a dozen wood rat houses nearby.

Sat AM (5 Nov.) had 1 ♀ *Peromyscus truei*, no embryos, in first area. One rat trap in other area sprung. (RCB 20.)

Sun. AM, had 1 ♂ *Reithrodontomys megalotis* in second area. (RCB. 21) Found ♂ *Didelphis virginiana* DOB, about .7 mi E. of San Pablo Rd. on Bear Creek Rd, 1 mi. N. .5 mi. W of Orinda, 400± ft. Very big and fat. Good shape, good skull, bled some around nose. Took about 4½ hrs. to put him up as RCB. 22.



Banks, R.C.
1955

8.

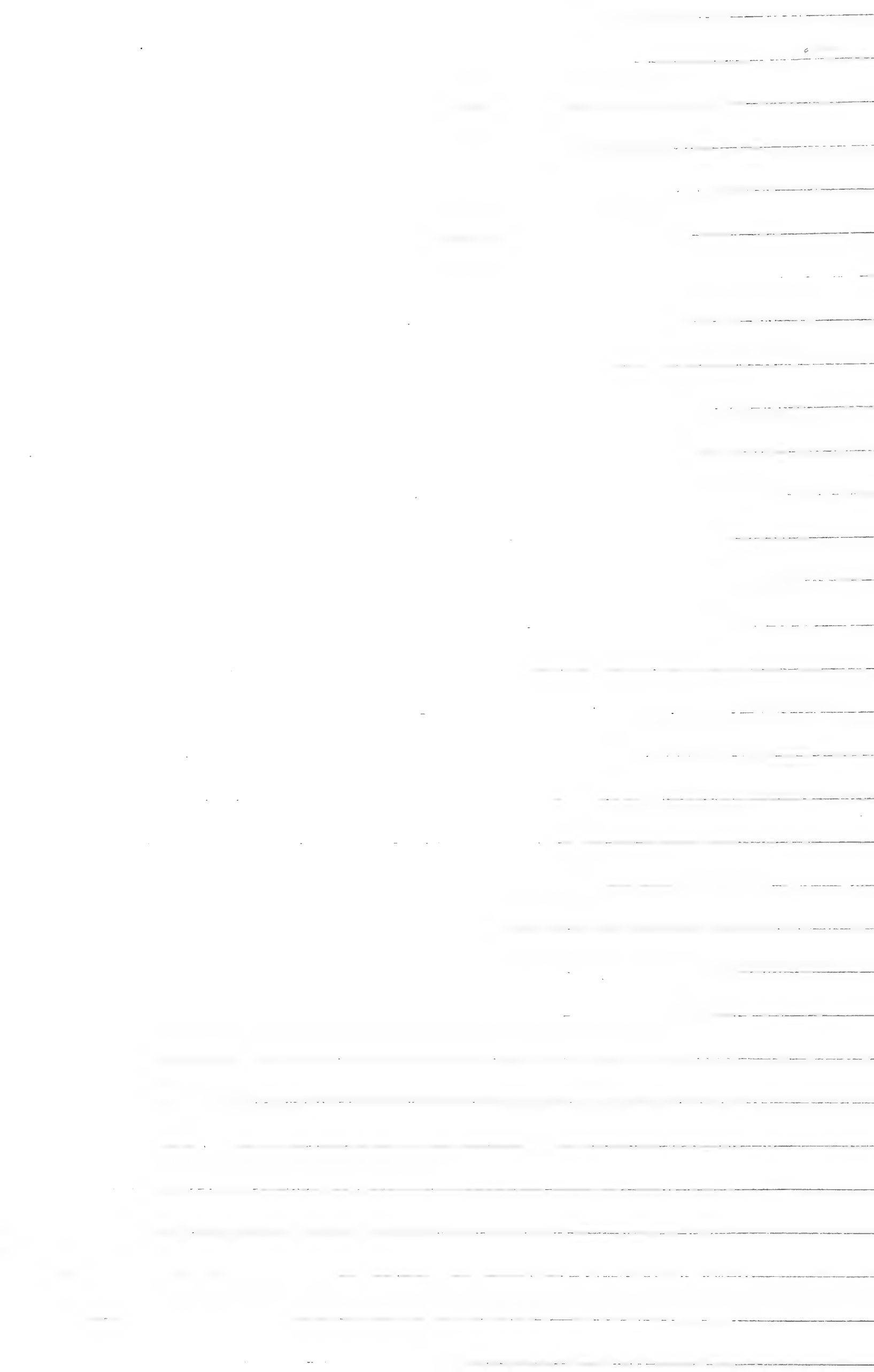
13 November.

Set 24 mus. sp. 2 rat traps off Donald Rd. 2.1 mi E, 1.1 mi S. Orinda, 1450 \pm ft., Contra Costa Co. Area was steep hillside, covered with poison oak and *Baccharis pilularis*. Set traps 12 Nov. P.M. Sun. A.M. picked up traps in pouring rain. Got 1 ♀ *Microtus californicus*, (RCB. 23), 5 *Peromyscus truei* (4 ♂ 1 ♀). Saved 3 as RCB. 24, 25, 26. Others measured ♂ 162-75-20-20, ♂ 145⁺-57⁺-20-20. (tail partly gone). also had two too badly chewed to identify, probably *truei*.

18-20 November

J. Ondrias + I set 50 traps on Mulholland Hill, (Donald Rd). 2.1 mi E, 1.1 mi S. Orinda, 1450 \pm ft., Contra Costa Co., Calif., just around dark on Fri. 18 Nov. A gentle mist was falling. John set some along thistle row on one side of road, mine + the rest of John's were in *Baccharis pilularis* on other side of road, and down very steep bank.

Sat A.M. we had a very unusual haul. We had a total of 22 animals. This included 1 ♀ *Sorex trombidgeri*, one ♂ *Microtus californicus*, 1 ♂ *Perognathus californicus*, 1 ♂ *Microtus masulus*,



Banks, R.C.
1955

9.

3♂ 2♀ *Peromyscus truei*, and 6♂ 3♀ *Reithrodontomys megalotis*, and 1 unidentified mouse (*Peromyscus maniculatus*?) Also caught were 2 newts, (*Triturus torosus*), and 1 Fox Sparrow, *Passerella iliaca*. I put up the bird, 1 *Reithrodontomys* ♂ the Sores, 1♀ + 3♂ *truei*. John did the *Perognathus*, the *Microtus*, and 1♂ *truei*. As usual, all *Reithrodontomys* were by the thistles, all *truei* by the *Baccharis*. The *Perognathus* + *Mus* + unidentified were also by the thistles (they joined a grassy strip), the rest by the *Baccharis* (Coyote Bush, Chaparral Broom).

Sun. AM. we had another unusual catch. It included 2♂ Spotted Towhee (*Pipilo maculata*), 1 Fox Sparrow, 1 Plain Titmouse ^(*Parus inornatus*)?, 1 newt, 1♂ *Peromyscus truei*, 1♂ *Mus musculus*, 1♂ *Microtus californicus*, 3♂ 2♀ *Reithrodontomys megalotis*. I did the *truei* + the *Microtus*, John the *Mus*. The *Reithrodontomys* were all pretty well chemed up or beat up. These *Mus* specials are too large for *Reithrodontomys*. They are usually (at least often) caught by the tail or hind feet, and live to chew their tails or feet. If they are killed, something else usually chews them. Might they be cannibalistic? See specie accounts for data on mice put up as skins. Gave birds to J. Schnell.

1955

25 November.

50 mus. sp. along sides of irrigation ditch or stream, in grass and weeds, approx 2 mi N. Pleasanton, Alameda Co., Calif., 7 ± ft., with f. Ondrias. Caught 1 *Sorex ornatus*(?), 4 ♂ 1 ♀ *Mus musculus*, 1 ♂ *Microtus californicus*, 1 ♂ *Reithrodontomys megalotis*. John did *Reithrodontomys* and *Sorex*, David *Microtus* and ♀ *Mus*. (RCB 35-36) *Mus* had enlarged mammary glands, no embryos, something in uterus may have been placental scars (7 or 8).

18 December

On 17 Dec. set 50 mus. sp. and 5 rat traps near Galen Hostle's, 1.8 mi. S., 1 mi E. Orinda, Contra Costa Co., Calif. 10 specials were in grassy weeds, 15 in weedy field. 8 were in clearing + *Rubus* under live oak. All others were in very heavy brush, in a rough line extending up hill. Several wood rat houses in area.

A.M., Dec. 18., checked traps with J. Schnell + J. Ondrias. Had 5 *Reithrodontomys megalotis* in grassy weeds, 1 in brushy area, 7 in weedy



Banks, RC.
1955

11.

field. Had 1 ♀ *Peromyscus maniculatus* and 1 ♀ *Sorex townsendi*. under live oaks. Had 1 ♂ *Peromyscus truei* by thicket of brush in weedy field. Caught 4 *Peromyscus californicus*, all ♂, in heavy brush. Also had 1 *Triturus torosus*, 1 *Junco oreganus*. I prepared the *Sorex maniculatus*, *truei*, one *californicus*, and 1 ♂ *Reithrodontomys*. Schnell did the *Junco*, 1 *californicus*, 1 *Reithrodontomys*. Ondrias did ~~the~~ 2 *californicus* and 1 *Reithrodontomys*. My skins are 37-41, Ondrias' 14-16.

19 December

J. Schnell + I checked traps again, same area as yesterday. Had 2 *Microtus* ^{1 ♂ 1 ♀} *californicus*, 1 *Reithrodontomys megalotis*, 1 *Peromyscus truei*, 1 *Triturus torosus* (Kent) in weedy-grassy fields. Had 1 *P. truei* in Rubus under live oak. It had rained all night, was raining as we picked up traps. I put up all mammals except *Reithrodontomys*, as R.E.B. 42-45.

Bentley, R.C.
1955

12.

28 Dec. 1955

On P.M. of 27 Dec. set 25 mus. sp. in and near
Pine woods (Pinus) in Berkeley
Hills, near corner of Sherrick + Bristol Drives,
Oakland. Elevation is about 1025 ft. On 28th
had 3 *Peromyscus californicus*, 2 ♂ 1 ♀. Did
them as T.C.B. 46-48. Entirely different
habitat than where last ones were caught.

Banks, R.C.
1956

13.

24 January 1956

On P.M. of 23 Jan. set 21 mus. sp., 5 rat traps, 2 gopher traps near corner of Buckingham Blvd and Bristol Drive, Berkeley Hills, Oakland, Alameda Co., Calif. Gopher traps + 4 mus. sp. in grassy field, nothing caught. Rest in Pine or edge of Pine, some Baccharis near. One rat trap set on fallen log in area of low brush. Log was covered with droppings, evidently a runway, and was rotted. May have been followed out some + used as nest or runways. Caught ♀ Peromyscus californicus with 2 embryos here. Got two Peromyscus truei, one ♂ in Pine (near edge) one ♀ in Baccharis. Caught these and picked up traps 24th A.M. Many traps sprung, probably due to heavy rain in night.

4 Feb. 1956

Set 21 Mus. specials, 5 rat traps 1.8 mi S, 1 mi E Orinda about 250 ft. Most in heavy brush, near lots of wood rat houses. Caught only 1 ♂ Peromyscus truei. It was in a brushy spot, less than 10 ft. from a woodrat house. Kicked apart some houses, no signs of occupancy. Lots of varied thrushes in area. Sign of deer, cattle, + man, lots of game trails (?).

Banks, R.C.
1956

14

11 Feb. 1956

J. Schnell + I were at end of Donna Maria Way, 1.8 mi S.
1 mi E. Orinda, Contra Costa Co., 750±ft, doing some
plant collecting. Just as we got out of car we
noticed weeds moving at edge of field. On
investigation nothing was there, but by a
gopher mound one weed was being pulled
down thru the ground. It was a dead,
last year plant, unidentified. Set 2 gopher
traps, one in this spot, one a couple yards
away. In about 2 hours we heard one
go off, and had caught a ♀ Thomomys
bottae. Removed it from trap + killed it.
Only dirt in cheek pouches. It is now PCB 53.
This was in the afternoon.

When stuffing this animal, I was
amazed at the number of mites. Must
have been well over a thousand.

Ants, R.C.
1956

Journal

+
3.

26 January 1956

Large flock of Robins feeding on berries of Cotoneaster and barberry? along Van St. by swimming pool at Men's Gym. Also a few English Sparrows and White Crowned Sparrows. Kept flying across street to Unitarian Church yard. Suddenly all movement and sound stopped, except a warbling like note from the Robins. Most birds dropped out of sight, but a few sat on cyclone fence. Movements, at least rapid or long moves, were not evident for several minutes, but notes and snatches of song increased soon.

Large flock Oregon Juncos and pr (?) Song Sparrow (♂ singing) along stream across street from North side LSB.

Song Sparrow singing along East side LSB.

ms, P.C.
1956

Journal

24

28 January 1956

h. Song Sparrows, 2407 Atherton, just off Channing
giving peculiar chipping note. One or both
fanned tail broadly. White Crowned Sparrow
singing across street.

A singing Song Sparrow in tree on Channing just
opposite entrance of Atherton.

Song Sparrow in front of Women's Club, Durant St.
English Sparrows nesting, or at least claiming
territory under tiles on roof.

Cedar Waxwings feeding on Stonewort by Men's
Gym. Robins also. Brown Towhees in
street.

Small flock (4♂ 4♀ ±) White Crowned Sparrow
feeding in grass by Arborvitae S.W. corner Men's
Gym. California Jay also there.

Oregon Junco's feeding Nicole L.S.B. Seen only
on sunny side of shade line.

1 Audubon Warbler

2 Purple Finch (?) feeding on buds of Willow
Russet Backed Thrush

Singing Song Sparrow in patch of berries, West side,
corner Pres. Rd., campus. Flew East toward
another singing Song Sparrow. Returned shortly.

White Crowned Sparrow sitting flat, not standing.
Hopped O.K. for short distances. May have had
missing or broken leg. Small flock White
Crowned Sparrows E. of bridge to Agr. Dept.

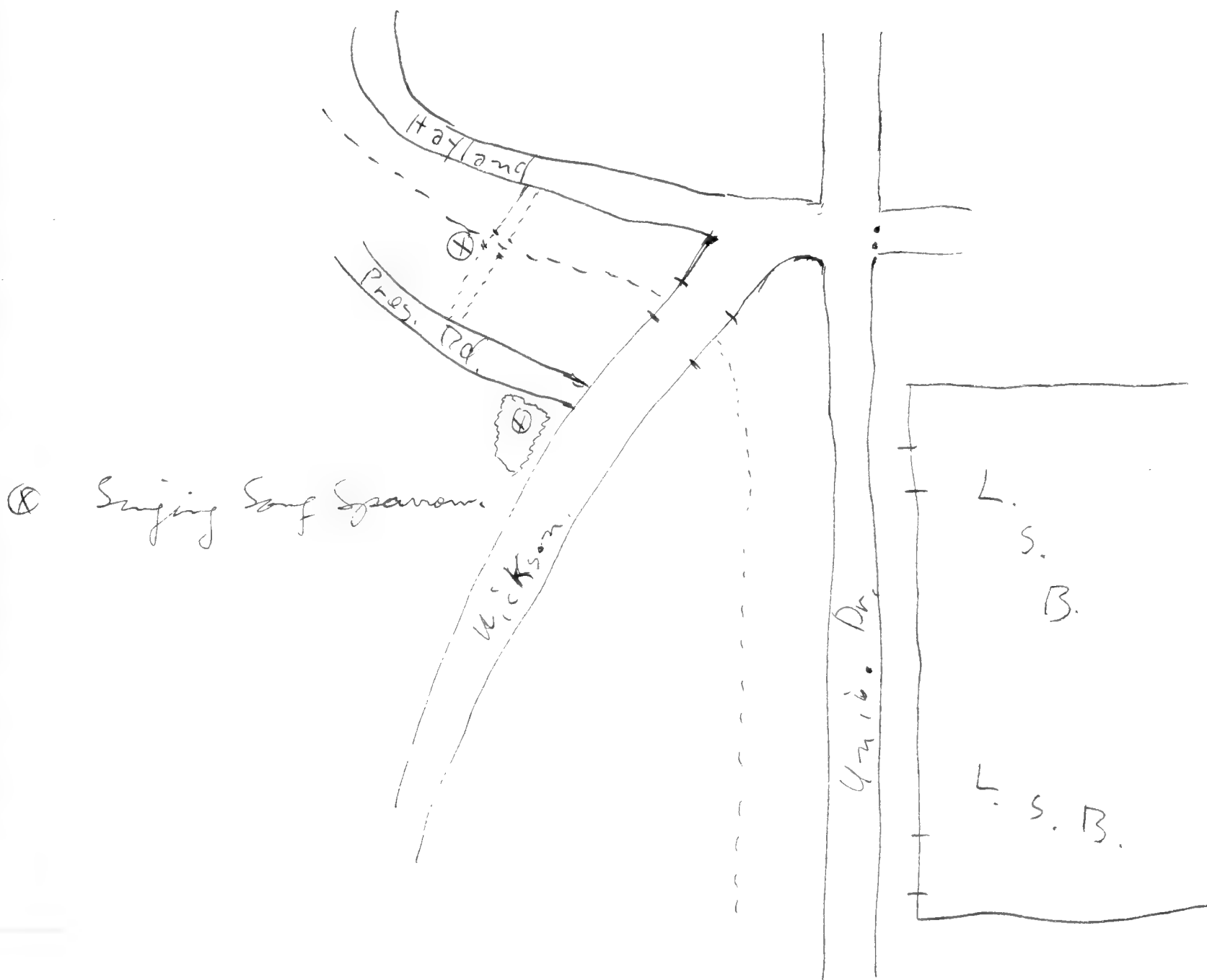


Journal

28 Jan 56

Song Sparrow singing at foot bridge to Pres. Rd.,
about 50 ft upstream from road bridge.

Plain Titmouse, Spotted Towhee, near Calif. Hall.
California Jay eating snail.



Banks, R.C.
1956

Journal

4
6

31 January 1956

Pn. Song Sparrows at 2226 Channing.

1 Song Sparrow feeding at S.E. ~~corner~~ L.S.B., in grass along bldg. W. of door.

Small flock White Crowned Sparrows between L.S.B. + Calif. Hall, N. of walk.

2 Fox Sparrows close by.

Flock Cedar Waxwings feeding on berries at N.E. door L.S.B.

Singing Song Sparrow lower Univ. Dr. + Wickson. Same or another bird just W. along stream.

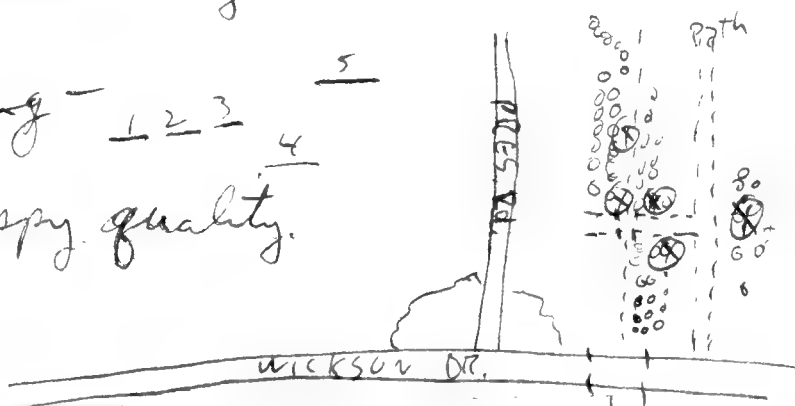
Cedar Waxwings bathing in stream.

Possibly 2 singing song sparrows along creek opp. N.E. door L.S.B. Neither sang often. May be 2 birds, or 1 bird w/ 2 songs.

Hermit Thrush, very lightly spotted.

Singing Song Sparrow on path going N. from Wickson, E. side of creek. Crossed creek, went N. 20 yds, heard again near path, near foot bridge.

Song - 1 2 3 4 5
Raspy quality.



⑤ - all same singing bird - Song Sparrow.

Occasionally left first 3-5 notes off song.

ank, R.C.
1956

Journal

5
7

10 Feb. 1956

0720± Along athletic field, on Bancroft St.
Pr. of White Crowned Sparrows. Have
seen them for several preceding days, act
very secretive. Today one sitting about
4 ft high, sang several times. The other
flushed from under some Cotoneaster,
then continued feeding pretty much in open.
Singing bird flew W. when people approached,
sang in another bush, then was silent,
feeding in that area, on ground. I judge
singing bird a ♂, other a ♀. ♀ gave a
note a few times, a sharp, high pitched
"peerrr". ♂ came back into open to feed
more readily than ♀ after pedestrians passed.

In same area, Robins fed on Cotoneaster berries,
a gull (imm., very dark) sat for while on
wall watching. This is opposite
bay on Epis. church.

Another White Crown sang farther East, in
same strip, did not bother the first pr.
This pair was E. of drive going into Ath.
Field. Fed in grass. Law Brown Towhees
in same place. One White Crown (♀?) carried
piece of food into bushes. Other followed.
Pedestrian came, both birds flew E. Song
Sparrow there flew to cyclone fence along
cement wall, sang loudly. This is almost
to Dana St. still on Bancroft. Pedestrians
chased Wh. Crowns W. again, where both
lit about 8 ft^{high} in a bush. One gave
"peerrr" as heard before. This one was

am K₉, R.C.
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10 Feb.

holder, sat in edge of bush in plain sight.
Soon began to sing. Evidently ♂, ♀
more concealed, farther in bush. after ♂
sang 3 or 4 times, both flew to lower
cement wall farther W. Sat about 3 ft
apart, ♂ continued to sing.

As I rounded corner of Bancroft + Dana,
Song Sparrow flew to Unitarian Ch.
yard, in large tree, sang once.
House Finch singing in ^{another} large tree.

0755± at least 6 White Crows in grass
N. of door to men's gym. Paid little
attention to passersby as they fed. Soon
flew into Arbutus ^{Japanese, mostly} apparently feeding
on berries. I had seen Robins feeding on
these berries yesterday.

0805± Field S. of Ag. Bldg. Saw (glimpse) of bird,
probably Sparrow Hawk, N. of Ag. Bldg.

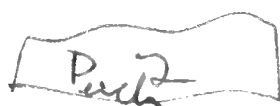
Song Sparrow (♂) singing atop Arbutus
outside main entrance Ag. Bldg. Flew
to lower perch, continued singing, after pedes-
trian passed. I had heard this bird from
about 100 yds. Very loud. Clean looking,
bright bird. Robin momentarily chased
him off perch, I think just flying by. S. Spar.
immediately returned, continued singing.
56-9-23-36-47-56-4-16-20-27-
35-41-51-01-9-16-25-37-49 (new
song) 59-8-16-25-35-42-

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These figures are time in seconds at which he sang. All songs delivered from a Willow (?) tree about 15 yds. from first perch, $7 \pm$ from second. All songs lasted about 3 seconds.



Stopped singing, silent for several minutes. Reappeared, singing, in perch 1, about half way to top of tree.

Found his mate feeding quietly on ground between perch 1 + 2. She went under tree of perch 1 when I approached. Did not see her again. This may be a good pr. to work on. I have at least 2 songs. Sings loud, could be recorded, altho background noise is great.

08³⁵₅₅ Song Sparrow singing by bridge on Wickham, Wetland. I by foot bridge farther up. ♂ stopped singing. ♂ singing by foot bridge. Another ♂ singing by road bridge. Songs alternating. ♂ by foot bridge soon singing violently, after. Other male stopped. Saw one by foot bridge, not other one. Both quit after a few minutes.

I squeaked by foot bridge. ♂ started to sing from near road bridge, fairly loud.

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from ground, near foot of live oak.

When all became quiet, I squeaked again. Road bridge male answered with song, from farther away. Saw a bird above foot bridge, but it did not sing. Probably the homelary of these 2 birds is not determined yet. My presence may have inhibited foot bridge bird. Foot bridge bird probably one I watched several days ago.

0850 Song Sparrow singing S. of P. road bridge. Road bridge male of before?

Had heard Song Sparrow sing N. of Vickson, but could not find him now.

0900 Saw 2 Hummingbirds (probably Anna's)? flying about in top of Pine. Very high. Could not get in good position to observe.

Stellar's Jay SW corner NVZ part LSTB.

Review. Feb. 10

♂ + ♀ White Crowned Sparrow gave same note, a high, sharp "peeh".

Song Sparrow sang at least 2 songs. Songs lasted about 3 seconds (probably $2\frac{1}{2}$ - $3\frac{1}{2}$), began at intervals of 6-14 seconds, average 9.3 - seconds.
First song began 6-14 seconds, av. 9.5 +
Second song began 7-10 seconds, av. 8.5

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11 Feb 56

Across from Epis. Church, by Ath. Field
2 pm. White Crowned Sparrows, very close.

~~P.M.~~

P.M. Contra Costa Co

Saw movement in weeds, saw
gopher (assumed) pulling down dead stalk
of a perennial herb. Bottom of stalk
eaten off cleanly, at angle. Set 2 traps.

Collected:

<i>Alnus rhombifolia</i>	Plant	1
<i>Salix</i>		2
<i>Ribes sanguineum</i>		3
<i>Sarcocolla manziessii</i>		4

After about 2 hours, while we were
collecting plants, caught ♀ Thomomys
botteri (gopher) in one of the traps.
(see above).

Found feathers where bird was killed. Varied Thrush?

12 Feb 56

Revisited area of ecology field trip in
Tilden Park. Revisited Sage, Grassland,
and Broad Sclerophyll forest.

Collected 1 small frog

"	<i>Ribes</i>	Plant	5
"	<i>Umbellularia californica</i>	"	6

Picked apart fox scat and found some
mouse bones, inc. lower jaw.

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13 Feb 56


0900 Flock of about 30 each Robins and Academy Wrenns feeding on Cotoneaster opp. Ellsworth St. along ath. Field. One Red Shafted Flicker in tree. White Crown Sparrow flushed as I walked by, gave sharp "peent" note. In a few minutes, White Crown sang feebly. A little farther up another White Crown feeding in grass. Same sharp notes, whistled a bit, (not sang). Another close by chirped several times.

Just north of drive into ath. Field, another pair of White Crowns.

Flock of White Crowns, apparently mostly immature, feeding by entrance to Men's Gym.

Outside LSB, W side, Spotted Towhees giving odd song. A short series, rapid, of soft chips, lasting about 1 second.

0930 On Fulton, just east of Allison Way, by ticket office. Pr. White Crowned Sparrows feeding in grass w/ Brown Towhees pr. Not much nesting cover around.

Fox Sparrow along stream W of LSB.
Button's Vireo in tree nearby, giving note that rose and fell abruptly. 
Sort of a whistled chip.

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4

1000 Oregon Junco singing near Agr. Bldg. As 2
standing under tree by Bldg., one
lit in tree above me giving very definite
alarm notes. Large no. of Robins, a Calif.
Jay also in same group of trees.

Song Sparrow sitting singing same location
as before in front of Agr. Bldg.

Large flock Robins + C. Waxwings behind Agr.
Bldg. (N) 6 ± Golden Crowned Sparrows
feeding in grass on flat behind Agr. Bldg.
parking lot.

1030 Song Sparrow singing in low shrubs NE of
corner Univ. Dr. + Hayland Dr. Sang only a
few times.

Song Sparrow singing in tree at steps to
Calif. Hall. Another bird flew in, S. Spar.
flew to Arbutus by flag pole, sang
twice, warbled a little. Then two flew
toward Blue Spruce by NE corner L.S.B.

White Crowned Sparrow singing loudly
in group of trees. Another was present.
Soon one chased the other into Arbutus
and shrubs around flagpole.
(First seen S. side of lawn between L.S.B. +
Calif. Hall). Seen feeding on ground
near flagpole.

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Spotted Towhee giving series of rapid, shrill notes at N.W. corner and S.W. corner Library, Song Sparrow singing at E. end Durant Hall. Song just once.

1110 Song Sparrow, P. Oregon Junco, Brown Towhee across street from SE corner Wheeler Hall. Very secretive. Along high bank of stream.

Fresh looking Woodpecker hole top of dead tree just W. of platform to power plant, S. of Wheeler Hall.

Hummingbird (♂ Anna's) sitting in top of small tree at S side Durant Hall, Sat for several minutes occasionally flying out + returning flycatcher style. Black throat + chin, greenish back, 3". Song like Anna's Hummingbird I heard previously (several days ago). High, raspy squeak, fairly loud considering size of bird. Flew about 50 ft away, returned very quickly + violently. Flew into shrubbery SW corner Wheeler Hall for about 1/2 min, returned to perch. About 10 minutes later it flew to height of 50 ± ft., zoomed down so fast I could not follow. It repeated this for a total of 4 times. Each time there was a loud sound as it reached the bottom of its fall (I guess). The last time it fed on red ^{Cydonia} japonica blossoms for about a minute, then disappeared. ^{W end} Wheeler Hall. 1140.

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Shortly it reappeared in original perch,
flew to live oak by steps at SE corner
Dunant Hall, returned to original perch.

1445 Brown Towhees copulating (?) S end of
field between Calif Hall + LSB.

White Crown still singing near flagpole.

Prin. Arbutae S. of pole.

Song Sparrow singing irregularly at SE
corner LSB.

1700 Pr. Mourning Doves by Presbyterian Church
on Dana, showing courtship behavior. Stood
facing each other, rubbed bills, as tho kissing,
stroking each other on neck + face. Male
was puffed up, appeared very dark. This
lasted about a minute, then they separated.

Bam Ks
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17 Feb. 56

0730

2 White Crown Sparrows across from Epis. Church. One sang a couple weak songs, the other was feeding a little distance away, flew to wall along Ath. Rd. First one gave "peent" note - seemingly of alarm. 4 other white crowns feeding in grass a short distance E, but W of drive into Ath. Rd.

0740

White Crown singing in Thuya about 12 yds. S. of flagpole between Calif. Hall + L.S.B. Bird hidden in bush gave "peent" note when I approached, remained hidden. One on top (♂) continued singing, ♀, inside, gave warbled trill, ♂ disturbed, fanned tail several times, changed position and fluttered wings. Movement of branches indicated that ♀ had moved very close below him. ♀ returned to original position, warbled twice more. ♂ continued to sing, hopped or wagged tail a few times. ♀ gave repeated "peent" as pedestrian traffic increased. (This seems to be near the place Blanchard referred to.)

0755

Song Sparrow singing by steps SE corner Durant Hall. Flew to SW corner Wheel, continued singing. Correction: It stopped singing. Another bird by wheel. Soon both were singing. Bird by Durant begins with 5 notes, Wheel bird with 3. Wheel bird hoarse.

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Hummingbird ^{Anna?} was sitting in same perch tree as last Mon. (Feb. 13), Heard it chipping also at SW corner Wheeler, where it had gone once last Mon.

0805 Another Hummingbird S. of Dec. Art Bldg.

0815 Song Sparrow singing in low bushes along stream to rear (N) of Dec. Art, S.E. of Union. First 3 notes of song seemed to come from somewhere other than the last part, ventriloquial effect. After gave a trill only, or a trill preceded by a chirp. Another song sparrow sang a few times closer to Union. First bird moved, heard trill to S. side Union.

Spotted Towhee, Oregon Junco, Robin and Vain'd Thrush in same area

Maybe two of Song sparrows very close together here.

0835 Faint beginnings of song sparrow song in rear (N.E.) Faculty Club. Later one sang a few times. In a few minutes one sang a few times along stream E. of Fac. Bldg.

0840 Song sparrow singing from ground N.E. corner Physics bldg., S. of Anthro. Museum. Small clump of bushes here, does not offer much ground nesting cover. Only saw 1 bird.

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18.
+6.

At least 3 Hermit Thrushes by bldg. E of
Eng. Bldg. (M.E. Bldg., SE. corner) large flock
Oregon Juncos, number of Robins also
around here.

0900 P.M. Calif Jays using song sparrows
usual perch in front of Agr. Bldg. Large
flock of Oregon Juncos + sparrows feeding
nearby on lawn.

24 Feb U.C. Campus, Berkeley. Cold today, after
5 days of rain. Bright and warm in the
sun. Song Sparrows and White Throats seen
rare, not singing much. Robins very
plentiful, Brown Towhees + Oregon Juncos
out in full force. Stellar's and Calif. Jays
seen, as well as House Finches. Out for
about 1 1/2 hr., from 0715 to 0845.

26 Feb. A very bright sunny day. Collected
a tree (Acacia? Legum.) on campus
#21. Ate lunch at noon by San
Pablo Res., went up to area of ecol.
Field Trip. While eating saw Red
Tailed Hawk, Sparrow Hawk, Coots,
Mourning Dove. Later collected Dentaria
integrifolia, Ribes Sanguineum. Turned
over logs, got several salamanders,
unknown spp. (2 or 3) While collecting
plants + looking over area, saw Red Tailed
Hawk, Vain'd Thrush, Brown Towhee, Spotted
Towhee, flock of Robins, heard White Throated
Sparrow. Home about 4:30 P.M.

Banks, R.C.
1956

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2 March. U.C. Campus, Berkeley. Left home 0715, came by way of Fulton. A lot of shrubbery cut along lower part of Fulton. Field on Bancroft. Could not find White Crows & spotted there Mon. Till about 0900 looked for and at White Crows and Song Sparrows around campus.

8 March. A lot of thrushes today, both hermit and Purpus back. Top Sparrow singing between LSB + Calif. Hall. at least 2 morning doves singing. House finches numerous. Left home 0640, arr. Uhus, 0715, watched birds until 0745 or 0800.

9 March Left house about 0615. Robins singing today, second time I've heard them. First time was 2 days ago. Counted 4 song sparrows between home + campus, along Fulton. Very overcast this morning, not light (very) yet. Watched White Crows along Bancroft until nearly 0700. Large number of Robins, Cedar Waxwings, Hermit Thrushes feeding on berries along Eshleman Rd., E of Adm. Bldg. Observed Song and White Crowned Sparrows on campus until 0900.

10 Mar. Pacific Coast, San Mateo Co. Evol. 125c
Field trip. Stopped several points. Saw many flowering plants. Killdeer nest (abandoned)? at 1st stop. Barnack Wren, 2 sp. Gill, Sparrow Hawk at 2nd stop. (See Evol. trip notes.) Saw Surf Scoters while eating lunch at Montana. Warm + bright in A.M., overcast, windy, + cool in P.M. Quite a few W. Meadowlarks in P.M. Also saw Calif. Gulls, Red Tailed Hawks, Western.

Banks, R. C.
1956

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20.

11 March Oakland Calif - Coots, Ruddy Ducks,
Andersbachs, Scamp, Aracet and
Ring Billed Gulls as we approached
Bay Bridge. Went down Skyline Blvd.
to Half Moon Bay. Saw Sparrow
Hawk, Red Tailed Hawk.
Beach N. of Half Moon Bay, 'S. of El Miramar ^{elev. 10±}
Caught garter snake in field. Dead surf
scoter on beach. Jay collected his head
and stomach. Saw Sanderlings,
about 10, and 2 Snowy Plovers.
Drove N., collecting plants + looking.
Arrived home about 8 PM, keyed plants
til midnight.

12 Mar. U of C Campus, Berkeley - Work on
Song + White Crowned Sparrows.

17 Mar. MT Diablo Contra Costa Co., Calif -
Zoo 125C (Ecology) field trip. Saw Orange
Crowned Warbler, Turkey Vulture, heard
Rufous Crowned Sparrow, Calif. Thrasher.

18 Mar. Marina Co., Calif - J. Schnell, RCB.
Left home about 0830. Collected plants in A.M.
ate lunch at Whin Beach. Saw 2 ♀ Golden-
Eyes. Lots of Crows, water birds. N. of
Stinson Beach saw Long Billed Curlew,
Northern Grebe, Goldeneyes, Ruddy Ducks,
S.B. Heron, Belted Kingfisher, American Egret
Several Black Crowned Night Herons,
Surf Scoter, White Winged Scoter, Calif. Gull,
Western Gull, 1 Bufflehead. Started home
about 3 PM, arrived Berkeley around 5 P.M.
Keyed plants until midnight.

Banks, P.C.
1956

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19.

- 23 Mar. Sagehen Creek, Nevada Co., Calif. J. Schnell and I left Berkeley about 1800 today. At LSB just before we left, Plain Titmouse, Robin, Cliff Swallow, Oregon Junco. Sun bright but going down. Moon already high, nearly full. Roads clean all the way. Arrived Sagehen about 0030 hrs. 24 Mar. By the time we packed in had some chow, and got to bed it was 0330. It was a beautiful walk in - bright moonlight on the snow. Low temp. of 21°F last night.
- 24 Mar. - A beautiful morning. Mountain Chickadees and an unident. woodpecker. Went to Jay's Goshawk nest. I shot at a Flicker, didn't get it. Heard & saw 3 Goshawks about 1115. The forest really is beautiful. Snow is 3-4 ft deep, temperature at 0900 was 50°F . Woods are very quiet except for the wind in the trees. Only an occasional bird, no chickadees although there were some around the camp. Set some traps on way back from nest, in melted areas around trees & in meadow, some along creek. In afternoon Jay worked on his blind, I took a walk on snowshoes. Some beautiful scenery, took some pictures. Ate supper at ~~2000~~ ²⁰⁰⁰, went to bed 2100. Very tired after walking & working in the fresh air. Having wonderful time.
- 25 Mar. Up at 0630, temp. 35° . Low last night 26° . Saw mouse in kitchen, so set 2 traps. Saw a Goshawk chasing(?) a small bird when I got water. Bright, sunny day. Checked traps. Had 1 ♀ Microtus near edge of creek, 1 shrew in brush pile, 1 ♂ Peromyscus along stream in meadow. Kept them cold in snow.

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25 Mar. Guttered Sage Hen Creek, Nevada Co., Calif.
Gutted & partly skinned them in P.M., without measuring. Jay & I worked on blind & nest all morning and until 3 P.M. Picked up traps, had nothing more. Left camp about 6:00, arrived at car about 7:45, got home at 1:15 A.M. on 26 Mar.

31 Mar. 1.8 mi S, Int. Arinda, Contra Costa Co., Calif. -
Set 20 mus. sp., 5 rat traps in brush under open live oak woods. Rained during night. Had 2 *Peromyscus maniculatus*, 1 *P. truei*, all ♂. Also had 2 *Eurysthis escholtzi* in one trap, and 1 *Passerella iliaca*. On 30 Mar. found a batch of feathers, neatly plucked, it appeared, I believe from varied thrush, on trail, a few others under nest-like structure in Madrone, but could find no pellets or anything. Found a *Triturus torosus* under a board. Specimens 67-73.

2 April Fulton St., NW corner Edwards Field.
Found broken piece of egg shell and 1 egg with hole in it on ground under *Cedrus* tree. Could find no trace of a destroyed nest, or of a nest in the tree. Several small birds had been making apurs over a Calif. Jay when I arrived. Eggs are pure white, ~~27.0~~ 27.0 x 20.3 mm. From comparison with the egg collection at MVZ, I judge them to be Mourning Dove. There is also resemblance to Flicker, but they are not as pointed as Flicker eggs.

3 miles, D.C.
1956

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W corner Edwards Field, U.C. Campus, Berkeley
6 Apr. Tried to record young birds in nest C at 0630-0800 today. An awful lot of background noise. The equipment is such: Crescent recorder, mixer, and auto battery. Rented the recorder, mixer, ear phones, etc. and bought tape (2 7" reels, dual track), 12 spools, leader, splice, for \$46.46. Battery cost 4.00 (3. + 1. for charge). Built a cart out of wood + wheels Jay + I got from the dump. Worked fine until a wheel came off. I held the mike close to the nest, tried to get the birds that way. Not much. Lodged mike in bushes to get sounds as I fed them, but she wouldn't go to nest when I was so close. Then outside noise became too much.

U.C. Campus - Did the first exchange today at about 1100, with the help of J. Schnell. White Crown nest A had 3 eggs, 5th or 6th day of incubation. Song Sparrow nest Z had 2 eggs, 3rd day of incubation. White Crown eggs considerably larger than others. Took 2 eggs from A, put in Z nest, took those 2 and put in nest A. Broke the other egg from A while trying to mark it. Put eggs in museum egg box, walked as fast as I could from white Jay kept White Crown off nest.

9 Apr. U.C. Campus

Met Reed Pierce, interested in seeing White Crown nests. He is working in the herp lab.

10 Apr. U.C. Campus - Reed Pierce made the records with me today, checking the nests.

Apr. 12 Meth Church Parking lot near campus - tried to record young of nest D about 0945. They wouldn't make a sound when I held mike over them. Parent birds very disturbed. Propped mike in bush near nest, in hopes that parent birds would feed and I would get that sound. A lot of outside noise - traffic, radios, wind, airplanes, etc. Ran tape for about 40 minutes. Didn't get anything. Banded young and removed an infertile egg.

13 Apr. E. side Trinity Church Parking Lot, Berkeley.
Nest D - Recording from about 0645 to 0730. Using museum truck, inverter, Crescent $7\frac{1}{2}$ ips. recorder, and Shure model 76B crystal lapel mike. The mike is about 6-8 inches from the nest. I am sitting in truck watching. See species account (*Zonotrichia leucophrys*). This way I can watch controls and not waste tape.

14 Apr. Left Berkeley at 1500 with Dr. + Mrs. Miller and Bill Hamilton. Very cloudy, cool, rained some on the way. Sun was out briefly around Monterey. Saw what may have been a white-tailed kite. Saw 2 deer as we neared Hastings Reservation. Arrived Hastings Reservation, Monterey Co. at about 2030 hrs. Turned in about 2230 hrs.

Banks, P.C.
1956

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25.

15 Apr. Hastings Reservation, Monterey Co., Calif.
Out of house at 0540. Saw these birds:
Calif. Jay, Yellow-Billed Magpie, Band
Tailed Pigeon (flock of 60-70), Brown Towhee,
Cov. pair Western Bluebird, House Finch,
Black-headed Grosbeak, House Wren, Plain
Titmouse, Bewick's Wren, Anna's Hummingbird,
(~~3~~ three), Red-shafted Flicker, Spotted
Towhee, Western Meadowlark, ~~and~~ Green Backed
Goldfinch, Ruby Crowned Kinglet, ~~Pl. Western~~
(Black-tailed) Gnatcatcher, ~~Blue~~ Orange-
crowned Warbler, Red-tailed Hawk, Song
Sparrow, Pileolated Warbler, Hermit Thrush,
Wren-tit, Western Flycatcher, Violet-green
Swallow. Returned for breakfast
about 0800. Weather was cloudy at the
start, but cleared up some later.
About 0900 we we joined Dr. Bill
Fish, and went recording. The
party included Fish, Dr. Jean Lincolde,
John Davis, Dr. Miller, Bill Hamilton + I.
Fish used a Magnemite, strapped
over his shoulder, with a high impedance
dynamic mike in a 2 1/2 in. parabola
on a tripod, feeding in through a
"pre-amp" which he built. In the
afternoon I talked with Fish for a
while about the equipment and he
played my tapes. Later he played the ones
recorded in the morning, for Dr. Miller,
Davis, + I. Very good songs at ranges of
100-150 ft. (Blue Headed Vireo, House Finch,
Purple Finch). About 1600, Hamilton,
Davis + I walked around some, didn't

Banks P.C.
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26.

15 Apr. Hastings Reservation, Monterey Co., Calif.
see much. Very dark & cloudy, getting
cool. Paris identified a lot of plants
for us. Additional birds seen
during the day were: Sparrow Hawk,
Turkey Vulture, Purple Finch, Black
Pheasant, Warbling Vireo, Blue Headed
(Solitary) Vireo, Black-Throated-Grey-
Warbler, Chipping Sparrow, Bush-tit,
Nutcracker Woodpecker, Stellar Jay, Calif.
Thrasher, Cowbird, White Crowned Sparrow, 40

16 April. Out at 0600. Saw these birds in
morning, until about 0800: Calif. Thrasher,
Crow, Spotted Towhee, House Wren, House Finch,
Y.B. Waspie, Calif. Quail, Cowbird, Plain
Titmouse, Bush-tit, Red-shafted Flicker,
Mourning Dove, W. Meadowlark, Black-Thr-
Grey Warbler, Violet Green Swallow, Band-
tailed Pigeon, Purple Finch, Sparrow Hawk,
Cooper Hawk, Orange Crowned Warbler,
Pileolated Warbler, Brown Towhee, Hermit
Thrush, Black-headed Grosbeak, Warbling
Vireo, Western Flycatcher, Western Bluebird,
Calif. Woodpecker, Oregon Junco. Later,
0915-1200, with Dr. Miller & Bill H. Saw
Lincoln Sparrow, Anna Hummingbird, Wren-tit,
Golden Crowned Kinglet, Ruby Crowned Kinglet,
~~Black-tailed~~ ^{Western} Gnatcatcher, Bullock's Oriole, Yellow
Warbler, Bewick Wren, Yellowthroat, Hutton's
Vireo, Black Pheasant, Pileolated Warbler, Golden
Crowned Sparrow, Stellar's Jay. Dr. Miller was
very helpful in pointing out the birds and
identifying the notes. Also saw Varney Woodpecker,
(Also saw herd of 9 deer, plus a few singles)

53	Tyto alba		
54	Bubo virginianus		
55	Dendroica coronata		
56	Petrochelidon albifrons		
57	Columba fasciata	✓	✓
58	Ixoreus naevius		
59	Archilochus alexandri		
60	Dryobates villosus		
61	Accipiter cooperii		✓
62	Sayornis saya		
63	Vireo solitarius	✓	
64	Dendroica aestiva		✓
65	Otus asio		
66	Sphyrapicus varius		
67	Dryobates pubescens	✓	✓
68	Bombycilla cedrorum		
69	Cathartes aura	✓	
70	Dendroica nigrescens	✓	✓
71	Oreortyx picta		
72	Piranga ludoviciana		
73	Amphispiza belli		
74	Wilsonia pusilla	✓	✓
75	Passerella iliaca		
76	Tyrannus verticalis		✓
77	Megasceryle alcyon		
78	Geococcyx californianus		
79	Nuttallornis mesoleucus		
80	Phalaenoptilus nuttallii		
81	Certhia familiaris		
82	Passerculus		
83	Dendroica townsendi		
84	Lanius ludovicianus		
85	Passerella lincolnii		✓
86	Otocoris alpestris		
87	Asyndesmus lewis		
88	Oporornis tolmiei		
89	Aimophila ruficeps		
90	Progne subis		
91	Spinus pinus		
92	Selasphorus alleni		
93	Anthus spinoletta		
94	Penthestes rufescens		
95	Hylocichla ustulata		
96	Spinus tristis		
97	Falco columbarius		
98	Empidonax traillii		
99	Agelaius tricolor		
100	Oxyechus vociferus		
101	Molothrus ater		✓
102	Geothlypis trichas		✓
103	Regulus satrapa		✓

Banks,
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27.

16 April Hastings Reservation, Monterey Co., Calif.

In the afternoon we had an opportunity to talk with Dr. Thorpe, from England. We discussed general things mainly, but compared his work to my problem and he seemed interested. He was a fairly easy man to talk to on such short acquaintance. We left the reservation about 1500, arrived in Berkeley about 1900 hrs. Birds added on the way home were: Redwing, English Sparrow, Coot, Brewer's Blackbird, Western (Ark.) Kingbird. (Last near Res.)

18 Apr. U.C. - Bancroft along ath. Field, Lower Sac, Nest B.

Put equipment in wheelbarrow. Started recorder running at 0622. Stopped tape at 0655. These young today are in their 5th day, counting the day they hatch as "one". Traffic started to pick up about 0630, but still not too heavy. While recording, a Western Meadowlark flew across stadium, landed in Thuya near nest. English Sparrows also spent some time on the wall above the nest.

21 Apr. Rean Men's Fac. Club, Nest 2 - Set ~~some~~ ^{micro} about 8 in. from nest. Turned on recorder at 0703, stationed myself on kitchen porch. ♂ chirping until 0709. Nothing until one brought food at 0716.

Banks
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28.

- 21 Apr. Big Basin State Park, Santa Cruz Co., Calif.
Left LSB and Berkeley about 0830. Stopped
to see several stands of conifer forests.
200125C field trip. (Dr. Pitelka, P. Anderson,
J. Schnell, G. Robinson, D. Roberts, M. Marsh, F. Turner,
J. Brooks, Carol, and R. Bonds. In late
afternoon, Brooks + I set 100 snap traps +
Marsh set some live traps in Redwood - D. Fir -
Lithocarpus on E-SE facing slope. Dr. P. set
45± in Pinus attenuata, Jay S. set 45± in
another area.
- 22 Apr. Up at 0530, checked traps. Joe B. + I had
27 Peromyscus, some truei, some
californicus. Dr. P. had 1, Jay had 5, Marsh
had 5, plus 1 dead Sorex (townsendi?)
Made 2 stops on return trip,
arrived Berkeley 1400±.
- 24 Apr. Berkeley - UC - Put up 3 Peromyscus
californicus, 1 truei. All these dated
on labels and in catalogue as of day of
capture. Dr. Benson checked the traps
nice for Dr. Pitelka, found in our
lunch 13 truei, 14 californicus. Dr.
Pitelka saved me 5 of each.
- 26 Apr. Put up 2 P. truei, 1 P. californicus from
same area as 24 Apr. (Big Basin).
- 28 Apr. Red Stream N LSB, Nest Y. - Recorded
young Song Sparrows ~~for~~ in nest from
truck from 0625 - 0655.
Hopland Experimental Station, Mendocino
Co., Calif. - Ecology (200125C) Field trip.
Left LSB 0715±. Went directly to
Hopland Station. Met Plant Ecology
class under Dr. Major from Davis.

28 Apr. Hoiland Exp. Station, Mendocino Co., Calif.

Dr. Loughurst and Dr. Heady spent the day taking us around showing us the area and the projects underway. This station, northern Mendocino Co., is 4600 acres, 18% chaparral, 30% woodland, 25% grass, the rest oak forest, cultivated, etc. It is managed by U.C. (Davis) mainly for sheep range experiments. Loughurst is the resident zoologist, Heady is range ecologist from U.C. (Berkeley). Al Murphy is the manager (or supt.).

29 Apr. Return to Berkeley via coast. Made a couple stops for observing some aspects of the coastal conifer forest. Birds seen included: Cal Quail, Bullock's Oriole, House Finch, Chipping Sparrow, Black Phoebe, Robin, Redwing, T. Vulture, Calif. Woodpecker, Violet-green Swallow, Green Backed goldfinch, Mourning Dove, Calif. Jay, Plain Titmouse, Downy Woodpecker, Lark Sparrow, Western Bluebird, Warbling Vireo, Crow, Red Tailed Hawk, Raven, Orange Crowned Warbler, Audubon Warbler, Bush-tit, Solitary Vireo, Golden Eagle, House Wren, Golden Crowned Sparrow, Screech Owl, and on return added Black Headed Grosbeak, Stellar Jay, Bewick Wren, Yellow Warbler, Pileated Woodpecker, American Merganser (1♀), Pileolated Warbler, Western Flycatcher, Western Gull, Ring-Billed Gull. Also Red Shafted Flicker, Sparrow Hawk, Red Shouldered Hawk (?). Picked 2 Sceloporus occidentalis, collected by D. Roberts.

Banks
1956

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29 Apr. Hopland Exp. Station, Mendocino Co., Calif.
Collected 1 Contra

Saw and caught a Rainbow Trout
24 inches long in a small pool in
stream at Hopland. Given to Al Murphy.

5 May MVZ - A Mr. Shelton came in, He
was one of the old timers of the museum in
the days of Gurnell, J. Dixon, T. Storey, etc.
Ochetona princeps sheltoni was named
for him by Gurnell

20 May Nature Area, Tilden Park

Purple Finch, Am. Goldfinch, House Finch,
Song Sparrow, Chestnut Backed Chickadee,
Plain Titmouse, Cal. Jay, Steller Jay,
Robin, Black Headed Grosbeak, Pileolated Warbler,
Spotted Towhee, Gambel's Cal. Quail, Chipping
Sparrow, Cassin's Backed Thrush, Mourning
Dove, Bush-tit, Red Tailed Hawk, Redwing,
~~Orange Crowned Warbler~~, Wren-tit, Cedar
Waxwing, Yellow Warbler, ~~Butcher Bird~~ ^{PK}
Olive Sided Flycatcher, A pleasant
1 1/2 hr walk on the trail around Jewel Lake.

28 May Mt. Diablo Contra Costa Co., Calif.

Saw Lazuli Bunting. Picked up
Citellus beecheyi DOR ♀ approx. ^{2.3} mi.
below summit, Elev. about ²⁶⁰⁰ ~~3000~~ ± ft.
Mileage on top 10401

ails
1956

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4 Jan Berkeley, Alameda Co., Calif - Left 0800
mileage 10782. Bright, sunny, + clear.
Took route 1 from San Francisco to
Monterey. From there went around
peninsula on 17 mile drive. Back to
Monterey and over to Salinas about 2100.

Brown Pelican

California Murre (N. Montana Beach)

Brandt Cormorant

Raven

Redwing

White Crowned Sparrow

Western Gull

Violet Green Swallow

Brewer Blackbird

English Sparrow

Western Meadowlark

Song Sparrow

Caspian Tern

Turkey Vulture

American Goldfinch San Mateo Co., Calif

Marsh Hawk

Cliff Swallow Santa Cruz Co., Calif

Pigeon Guillemot Santa Cruz.

Buck Hawk

Ring Billed Gull

Killdeer Santa Cruz Co., Calif.

House Finch

Red Bellied Hawk (Red Shouldered)

Pacific Loon

Pacific Grebe

Common Loon

Spotted Owl (See Sp. aut.) Trini E. Salinas

Monterey Co., Calif.

Many Sea Lions at Monterey Bay.

Pauls
1956

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5 June, Salinas, Monterey Co., Calif.

Left Salinas about 0700 mileage 10983.

House Finch singing outside motel.

N. of Hollister Rt. 152 In cherry orchard,
Saw Yellow Billed Magpie and
California Woodpecker, Mourning Dove.

This is Santa Clara Co.

N. El Vado, Merced Co., Calif. Burrowing
Owl sitting on fence post. Was gone
when we turned around.

~~Mar~~

Yosemite Valley Yosemite Park. Entered
park via Arch Rocks entrance, drove
up valley to Camp Curry. Beautiful
falls and cliffs. Saw Violet Green
Swallows and White Throated Swifts.

Stellar jays and Brewer Blackbirds are
very abundant. Also saw Robin, Grey
Squirrel. White deer stuck head in windows
(almost).

Drove around Park all afternoon + evening.
Saw Yosemite Falls, Bridalveil Fall, Vernal
Fall, Half Dome, El Capitan, other spots.

6 June Yosemite - In morning first drove
to Glacier Point. Mileage at start of day 11203.

Beautiful drive, took us 4 hrs. because we
stopped every chance. Saw Calaveras

Warbler, Western Tanager, Stellar Jay, Olive
Sided Flycatcher. Dad saw Mountain
Chickadee. Also Western Wood Pecker,

Robin, Audubon Warbler, White Throated Swift.

Took 5 pictures of Stellar Jay. Picked
up dead Stellar Jay at Glacier Point, 7214 ft.
Put it up in evening, #90.

Pauls
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7 June Yosemite Park, Calif. Mileage start of day 11272. Visited museum for about an hour, left Yosemite Valley at 0900. Went to Mariposa Grove of Big Trees, drove thru Tunnel Tree, visited Wamona Point, elev. 6810 ft. Left park, headed for Fresno + Sequoia Park. Arrived at General Grant Grove of ~~Yosemite~~ King's Canyon Nat'l. Park about 1600. Saw General Grant Grove, drove on road into King's Canyon (Rt. 180) about 15 miles. Lots of Mockingbirds around Fresno. Red Bellied Sapsucker, Olive Sided Flycatcher, Solitary Vireo, Western Wood Peckee, Robin, Black Headed Grosbeak, Rufous Crowned Sparrow, Chipping Sparrow, Fox Sparrow, Oregon Junco, Golden Eagle, Western Gnatcatcher, Western Tanager, all in evening at Park. Saw many Century Plant (Agave) in bloom. About 2230 hrs. heard a Poor-Will singing.

8 June Gen. Grant Grove, King's Canyon Nat'l Park 6400+ Took a walk in the area this morning. Saw Alder Flycatcher, Olive Sided Flycatcher, W. Wood Peckee (building nest), Oregon Junco, Fox, Chipping Lincoln, Song Sparrows, Western Tanager, White Headed Woodpecker, Mountain Chickadee, Robin, Brewer Blackbird, Purple Finch, Red Breasted Nuthatch, Hermit Thrush, Steller Jay. Left camp mileage 11473. Drove over some very hilly roads, drove to Merced. Big Trees in Sequoia Park are really mamelons.

Banks
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9 June Merced, Merced Co., Calif. Left here about 0730, mileage 11664. Drove to Lake Tahoe, via Sacramento. (99+50). Drove as far as we could on 89, to Emerald Bay. Visited Pope Beach, where we saw Yellow Headed Blackbirds (*X. xanthocephalus*). Stayed just S. of Richardson's on Rt. 89. Very beautiful Lake. Also drove to Fallen Leaf Lake, very nice.

Lake Tahoe, El Dorado Co., Calif. Teller Village Marsh
Set 6 mus. sp. in wet marsh on edge of dry marsh, 6 in dry marsh (meadow) nearby, and 9 mus. sp. + 3 rat traps in *Pinus ponderosa* woods. Saw Williamson's Scopschee in woods, heard at least two American Bitterns in the marsh. The marsh is huge, extending from the Pope Beach road at least a mile (probably more) to the south, and $\frac{3}{4}$ mi. wide. In the center is an island of 30-35 acres, raised 15 \pm ft. The water seems to be fairly deep, pond lilies grow in some places, grass + sedge over most of it.

10 June Didn't catch anything in any traps. Flushed an American Bittern in marsh. Left here about 0900, mileage 11935. Drove around lake to Emerald Bay slide. Stopped briefly at gambling places just in Nevada. Drove to Truckee + Sagehen Creek Station. Jay Schnell took us and showed us a Dipper (*Cinclus Americanus*) and nest. Saw a MT Bluebird on way back to Truckee. Drove to Nevada City.

hs
1956

Journal

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11 June Nevada City, Nevada Co., Calif.

Left here about 0845, mileage 12121 ..

Went to Banner Mt. Lookout, just outside Nevada City, saw White Headed Woodpecker.

Went to Marysville, Yuba City. Saw Black Tern between Yuba City + Colusa.

Saw Burrowing Owl just past Williams, Colusa Co., Calif. Went to Clear Lake, around the lake, across very crooked road to Hopland, Down 101 and around the bay via Valleys. Arrived Berkeley mileage 12426, about 2100 hrs. Around bay saw Short Eared Owl, Common + Caspian Tern, Western Grebes on Clear Lake.

13 June Livermore, Alameda Co., Calif.

Looking for Phainopepla, no luck.

Saw Heavis Woodpecker, 1 mi E. Livermore, on East Rd. between L. + A.E.C.

23 June Black Hills 26 mi N. Orinda Village, 1026 ft, Contra Costa Co., Calif.

Last night John Ondrias and I set about 25 traps on this hill. This morning we had 1 ad Pipilo e., 1 imm Pipilo e., This hill is unique, compared to surrounding hills. All others are grass covered, with trees in the draws to near the top. This is covered with shale on top and sports a growth of sage brush (samb) and chaparral. The plants are Artemisia californica, Quercus _____ and

_____ The ^{soil} is very light colored. There are some

Banks
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23 June Black Hills 2.6 mi N Orinda Village 1026 ft Contra Costa Co. Calif.

completely bare areas, esp. on top. On the West slope is chaparral, on the North more _____ with a form more like scrub. Our traps were on the West and north slopes. Also caught 2 Peromyscus ^{1♀ 1♂} ^{calif.}, Berrichman, Thryomanes bewickii. Birds seen & heard in area were Aphelocoma, Buteo borealis, Carthartes aura, Psaltirampus minimus, Chamaea fasciata, Pipilo erythrophthalmus (maculatus). Traps baited with walnut.

24 June Picked up traps this morning. Had 2 Peromyscus (1♀ 1♂) small. Also had 1 ad ♂, 1 imm ♂ Pipilo erythrophthalmus, 1 Thryomanes bewickii, 1 Chamaea, 1 Parus monachus. Saw several hummingbirds, some bird sp. as yesterday. Buck deer in hollow to S., ♀ on road farther down. Rather surprised at getting so many birds. Must be insects on the bait that attracts them.

7 July. Set traps 6 July, 7 PM, on S + E sides, around a little to N. Set 1 rat trap near an old wood rat house, cobwebs all over it. Set 4 bird line traps. This morning had 1 ♂ Neotoma ¹⁰⁴ fuscipes, 1 ♂ Peromyscus ¹⁰³ sp., 1 ♀ Pipilo ¹⁰⁵ fuscus, 1 ♂ Chamaea fasciata. Several traps sprung. the one by the rat house moved a ways. Flushed a goatsucker, rather small, little white on wings.



Sachs
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8 July Black Hills 2.6 mi N Orinda Village, ¹⁰²⁶10201, Contra Costa Co. Calif.
This morning the trap by the rat house was moved and the string chewed off (sprung, too). Another trap had been chewed off & was missing. This was found about 10 ft away, with a live ♀ Peromyscus ^{#107}californicus, held by the tail. Also got one ♂ Peromyscus ^{#106}truei. A large colony of Lophortyx at edge of area, many Pipilo erythrophthalmus. Saw Jack Rabbit. Man building house here reported "large wild-cat" makes rounds about every 5 weeks.

13 July. Set traps in line over E, N, + S. sides of hill. Where other lines went around, this went up and over, also, crossing the other lines. Found a trap set 3 weeks ago, had a Peromyscus. Skull was cleaned, probably by ants. Saved skull's hind foot, #108. Heard Bubo virginiana at 8:30 P.M. Also saw Chamaea fasciata, Pipilo erythrophthalmus, Buteo borealis.

14 July. Hard time finding traps. Had 2 Neotoma fuscipes, ♀, 2 Peromyscus californicus, 3 P. truei, 1 Pipilo erythrophthalmus. The mice slipped pretty bad, since I didn't get to them till late P.M. As I got to the area in A.M. heard Pipilo, Chamaea, Thryomanes and Parus inornatus in a group of 20 or more, making huge scolding fuss. I found the object of their attention was part of a large shed snake skin, partly in a hole under a stump. J. Anderson tentatively identified it as a Rattlesnake. The wrens, esp., were scolding, but the titmice were loudest.

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Black Hills, 2.6 mi N Orinda Village, 1000± ft, Contra Costa Co., Calif.

14 July. Saw 2 jack rabbits, Buteo ~~calurus~~ ^{manicivorus}, nothing unusual. Checked traps again about 7:30 PM, had Toxostoma edivivum near, but not in, a mus. sp. all others empty and unsprung. Got a glimpse of what might have been a Sceloporus.

15 July In the AM had 2 Neotoma fuscipes, inc. a small one (yng) ♀, and one Peromyscus sp. Also 1 Thryomanes lenichii. In PM had nothing, saw a Sceloporus. Picked up traps in P.M. Saw Celeptes cafer and Zenaidura. Many juncos in fields below the area, as well as goldfinches.

Mudholland Hill, 2.1 mi E, 1.1 mi S, Orinda, 1150 ft., Contra Costa Co., Calif.

28 July Set 10 live traps, 10 mus. sp. in grass + thistles along W. side of Donald Rd. 3 of mus. sp. were in Baccharis on E. side of road. Bait: grain + walnut.

29 July Had 1 ♂ Reithrodontomys in snap trap in grass. Had 1 ♂ Perognathus, 1 ♀ Peromyscus in snap traps in Baccharis (2/3 here). Had 1 ♀ Peromyscus maniculatus and 1 ? P.M. in live traps. Put them in with my snake (Thamnophis).

Barke
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1 Sept. Left Berkeley about 2:30 P.M. with John + Betty Davis + Mrs. Erid Austin. Drove as far as Reno by about 8 P.M. Saw a ~~Nighthawk~~ Nighthawk just W. of Reno. (Washoe Co., Nevada). To bed about 12.

2 Sept. Left Reno about 8. Drove to Salt Lake City. Saw Swainson Hawk, Kestrel, mt (?) Plover, Arrebet, some peeps, Camasbacks in Nevada. Not too hot - very pleasant driving.

3 Sept. Drove on to Steamboat Springs, Colo. Very pretty drive, but not much life.

4 Sept. Rocky Mt. National Park, Colo. - Got

here just before noon after a very beautiful drive. A lot of birds to be seen - Swainson Hawk + Sparrow Hawk very plentiful between Steamboat Springs + the Mts. Evidently migrating. Swainson sitting on hay stacks, Sparrow Hawks on poles + wires - about 1/2 mile. Saw one flock of Camasback. In the park saw Mt. Chickadee, Ruby Crowned Kinglet just after we got in park. Also Canada Jay. At the restaurant at the summit saw pipits. John + I walked up the tundra - wind was very strong + cold. At a rock slide beyond that (toward Estes Park) saw Pika - saw one, heard another. Very cute. It was running around the rocks, would sometimes sit on a rock in plain view. Saw Ravens. Later, at Rainbow Point (or Lake). had wonderful experience. A marmot was being fed by a man, so we fed it to take pictures. There were several chipmunks, and a young

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4 Sept. Rocky Mt. National Park, Colo.

ground squirrel (*S. m. m. t.*). Pika also seen. Two Canada jays + a Clark Nutcracker in beautiful fresh ad. plumage present. Steller jay also there. Took many pictures of Marmot, chipmunk, ground squirrel, and Nutcracker. Saw a bird flying which was White winged crossbill or Pine grosbeak. Wing bars very evident. Back + head very bright red. Black bill, and like three eye. Farther on, at next point, saw more Nutcrackers, Canada and Steller jays. Also were *Junco caniceps*. Chipmunks + ground squirrels, all very fat, were getting hunched. A Goshawk flew over. This was extremely fascinating, seeing so many new or seldom seen (for me) birds + animals. The beauty of the park is beyond description. The snow in the few remaining places is dirty, but the greens of the evergreen and the oranges, reds and yellows of the poplars contrast beautifully. The tundra is interesting but I couldn't investigate enough to write much about it.

Arrived Denver about 5:30 P.M. stayed in Shirley Savoy Hotel, H.Q. for A.O.U.

5 Sept. Denver

Meetings in Denver Museum. Met a lot of people. Looked over mus. in evening.

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6 Sept. Denver - Meetings + banquet in Boulder. Movies by Pettingill.

7 Sept - Meetings in museum. Very good.

8 Sept - Left Denver AM with Jay Schnell

Pt. Reyes, Marin Co., Calif.

30 Sept. Arrived late evening (7:00) after an afternoon at ~~Stinson~~ ^{Stinson} Beach. Set 21 traps in scrub + grass. Slept in car.

In A.M. had 10 *Peromyscus maniculatus* in 20 traps. Lost 1. 6 ♀ 4 ♂. Put up 3 ♀.

Fog very heavy late evening, cleared up about 10, closed in later. Foggy in morning, cleared about 9, closed in again about 10:30. Sealions on beach may be low now. Bird list for today:

Cornus corax

Falco sparverius many

Zonotrichia leucophrys many

Zonotrichia coronata ?

Larus occidentalis

Agelaius phoeniceus many - 1000+

Melospiza melodia

Circus hudsonius

Sayornis nigra 4

Passerculus sandwichensis 2

Cathartes aura several

Pelecanus occidentalis

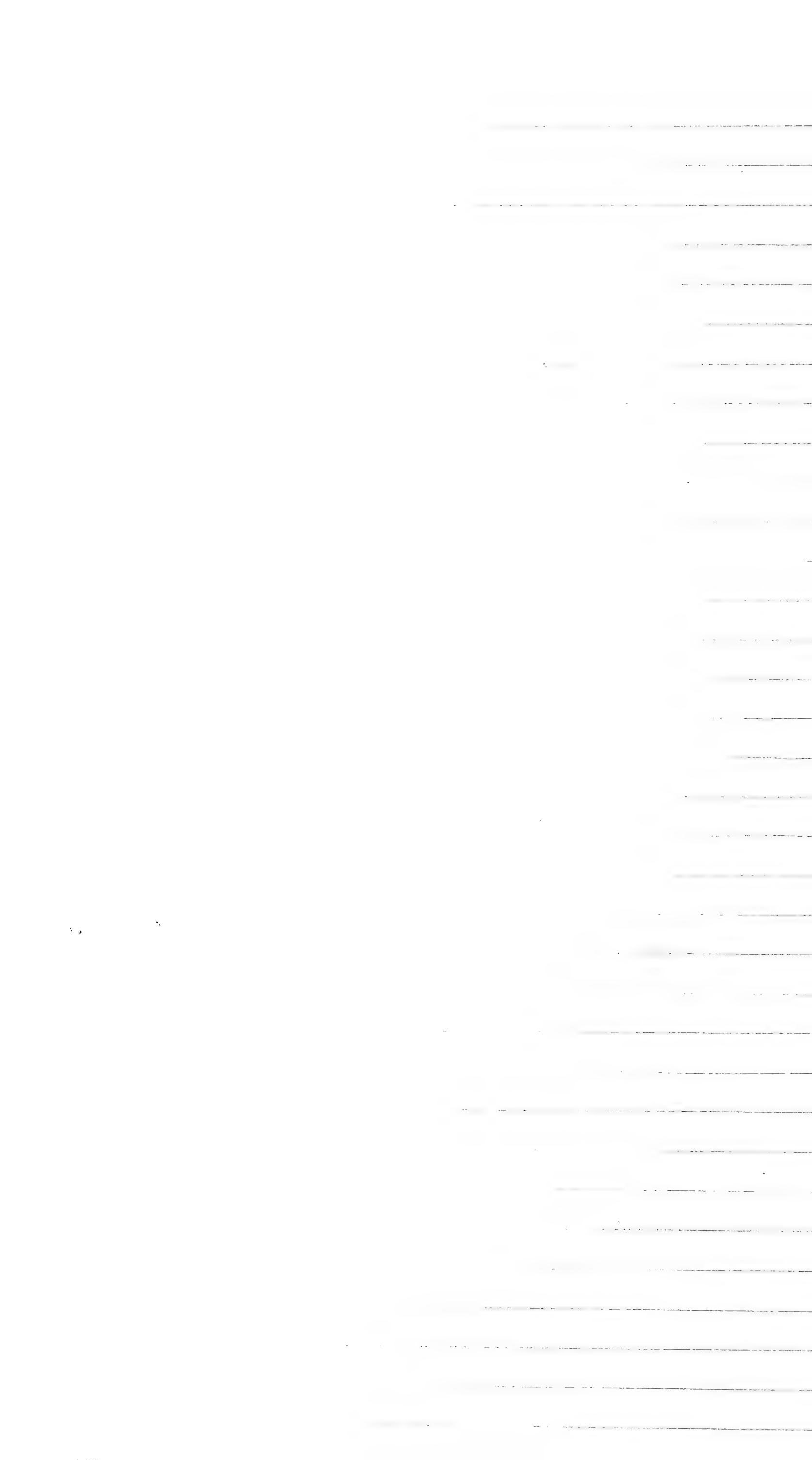
Aphelocoma coerulescens

Catoprophorus semipalmatus (Willet)

Buteo sp.

Collected a *Passerculus*. Put it up in p.m. as

#127.



1.8 mi S. 1 mi E. Orinda 750± ft Contra Costa Co. Calif
6 Oct. Left Berkeley with Jay Schnell & Charlie T. Kaelen
about 0730. Main object - see birds and
maybe collect some. Many birds when we
arrived, but as the day wore on they got
fewer.

Zonotrichia leucophrys (many imm.)
(some ad.)

probably *nuttalli* and *gambeli*

Zonotrichia coronata imm?

Spinus psaltria

Pipilo erythrophthalmus

Pipilo fuscus

Aphelocoma coerulescens large no.

Cyanocitta stelleri

Parus monachus

Parus infescens

Passerculus iliacus

Buteo jamaicensis

Dendrocopos sp.

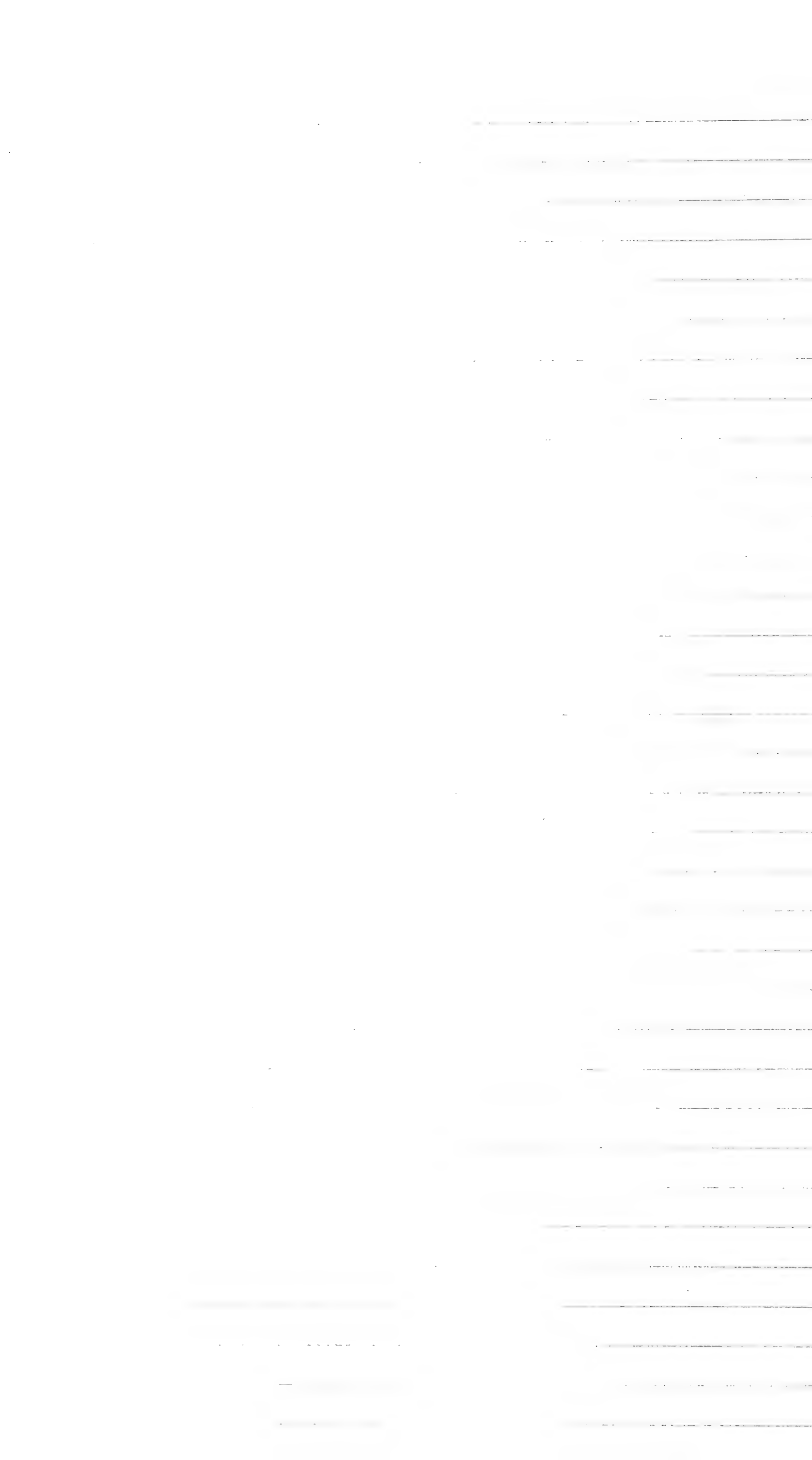
Carpodacus mexicanus

Collected 1 ~~Parus~~ *Passerculus iliacus*.

San *Regulus calendula*

Hummingbird

13 Oct. 1956 With Ralph Raitt, collecting Blackbirds
for use of Ornithology class skinning practice.
Huge flock of Redwings (*Agelaius phoeniceus*) in
field. We got 7 on first volley, that's all,
although we hunted rest of morning. Flock
broke up about 9:00. Saw Sharp-shin Hawk,
Killdeer, R.T. Hawk, Kestrel, Meadowlark, Dove
back thru Martinez, nothing unusual.



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Black Hills, 2.6 mi N Grinda Village, 1020 \pm ft, Contra Costa Co., Calif.

14 Oct. With Ned Johnson + Don Medina, collecting.

I got 1 Junco, 1 Zonotrichia coronata, one Hylocichla guttata. Tracked later to Ned for Pipilo erythrophthalmus. They did better, got Chamaea, Salpinctes, Aphelocoma, Colaptes, Vireo huttoni, Larus inornatus, Pipilo eryth. 19 birds all told. I saw a large owl, possibly Bubo virginianus, Saw one later I thought was same bird but maybe not Bubo. No good look. Very pleasant morning. Large flock of Quail in area.

20 Oct.

Left Berkeley about 3:15 PM with Charlie Thaler. Went to Walnut Creek, Dublin, and to Corral Hollow.

W Pleasanton on Rt 50 -

A small pond here "Gov't Prop. - no Tresp." Large no. of birds. Ruddy ducks about 275 \pm , 75 \pm loon, 1 small gull (sp?), ⁵⁰~~25~~ Killdeer, 30 \pm Cowitcher. (Bonaparte?)

3 Pintail, 3 Scaup. Heard W. Meadowlark. Also 1 Pied Billed Grebe, maybe 1 other grebe. Corral Hollow, Alameda Co., Calif. 700 \pm ft

Saw several deer just before or just in hollow. Set traps about .3 miles inside Alameda Co. Each set about 40 traps. Elevation of traps from about 700 ft. to about 800 ft. Heard Great Horned Owl. Was dark just as we finished setting traps. The area was well grazed, very dry grass. On the steeper slopes were many rock outcroppings. There were scrubby

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Corral Hollow, Alameda Co., Calif. 7000 ± ft.

20 Oct. bushes here, Artemisia, a yellow flowered bush, and a fard-smelling blue flowered one.

In evening went into Livermore. Saw Dipodomys on road in two places. One place set 4 rat traps. Next place set 3 traps. This one ran into a hole in the road bank, and while we were standing there, it came out, ran between Charlie's feet and stopped. He grabbed, it ran, I grabbed, it got away. Set one trap at entrance to hole it entered. Collected 2 toads. (in Alameda Co.) Got a deer in headlights. It saw its shadow, had its back to us, and was very confused. We coasted very close to it before it ran. On way back from Livermore saw a striped skunk. Just as we went to bed heard a barn owl. Lots of Jack Rabbits.

21 Oct. Up at 6:30. Heard Sturnella neglecta at 0600. Checked 7 traps along road. (From the one by the hole we took a Dipodomys on our way back from town.) Nothing. Checked main body of traps. Charlie had 1 Dipodomys, 1 Perognathus inornatus, 1 Peromyscus maniculatus. I had 1 Peromyscus maniculatus, 1 Perognathus inornatus, 1 Perognathus californicus.

After breakfast we went down the road into San Jacinto Co. about .5 mile. Walked up a draw on North side of road. Saw flock of Oreomophila alpestris, collected 1, saw Sayornis saya and Red-tailed Hawk. Bank elevation about 8500 ±.

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Journal.

21 Oct.

Cornal Hollow, San Joaquin Co., Calif 700± ft.

21 Oct. In another draw, with some seepage, large number of birds. Here we saw:
Carpodacus mexicanus, Aphelocoma
coerulescens, Junco, Dendrocopos villosus,
Dendrocopos nuttalli. I shot the Nuttall
Woodpecker and the house finch, Charlie
shot a Jay, a Junco, and the Hairy Wood-
pecker. Other birds we saw
during the day were: Lanius, Colaptes
cafer, Buteo jamaicensis, Falco spar-
verius, Chondestes, Charlie shot
a shrike on way back, S.E. Livermore.
Very interesting trip.

Between Livermore and Pleasanton,

Alameda Co. - Saw large group
of Coot (Fulica americana) 75±,
a couple Yellowlegs?, in gravel
quarry. Also 1 Larus delawarensis.

Hastings Reservation, Monterey Co., Calif

27 Oct. 56 Left Berkeley about 0830 with
Dr. Miller and Zoo 136 class. Saw White Tailed
Kites S. of San Jose. Arrived Hastings Res. about
1300. In afternoon looked around Res.

Bird list for day

Elanus leucurus
Chondestes vociferans
Agelaius phoeniceus
Sturnella neglecta
Sialia mexicana (?)

Pica nuttalli

Buteo jamaicensis

Corvus brachyrhynchos

Balanosphyra
formicivora

en-route (and also some later)

at Hastings Res.



Harting Reservation, Monterey Co., Calif. - 1750 ft
27 Oct. Bird list, cont'd.

Dendroica coronata auduboni

Pipilo erythrophthalmus

Psaltirius minimus

Pipilo fuscus

Asphoroma coerulescens

Regulus calendula (acc)

Parus inornatus

Vireo huttoni

Carpodacus purpureus

Zonotrichia coronata.

Spinus lawrenci

Carpodacus mexicanus

Spinus psaltria

Bonasa cedrorum

Thryomanes bewickii

Sayornis saya

Sayornis nigra

Hendocopus nuttalli

(*Accipiter velox* - by group)

Chondestes grammacus (in traps - maybe others)

Saw several Deer in the afternoon. In evening
ate with Davis in old school. Later they
brought out their screech owl, which
put on quite a show.

28 Oct. Up around 0700, in field about 0800.

Additional birds, not seen yesterday:

Chamaea fasciata

Sitta carolinensis

Euphagus cyanocephalus

Zonotrichia leucophrys

Junco oreganus

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Hastings Reservation, 1700ft, Monterey Co., Calif.

28 Oct New Bird list, cont'd.

Lophortyx californicus

Certhia familiaris

Sphyrapicus varius

Dendrocopos villosus

Dendrocopos pubescens

Dendroica townsendi townsendi

Hylocichla guttata

Cyanocitta stelleri

Accipiter velox

Troglodytes aedon (early)

Left Hastings Res. about 1330, for Monterey,
Coast, and Pt. Lobos.

Pt. Lobos, Monterey Co., Sea belt. Calif.

Plegadis occidentalis

Phalacrocorax pelagicus

Phalacrocorax brandti

Larus occidentalis

Larus heermanni

Arenaria

Zonotrichia leucophrys

Sayornis nigricans

Dendroica auduboni

Left about 19:15, after watching a sea otter
for nearly an hour. Arrived Berkeley
about ~~20:30~~ 2230 hrs.

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1956

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18 mi S, 1 mi E, Orinda, Contra Costa Co., Calif. 750 ± ft

22 Nov. Arrived at end of Donna Maria Rd., near Helen Trurtle's, just before 8:00. Here in the shade it was rather chilly. The birds were active in the weeds and brush at the edge of the woods. Immediately on my arrival I saw and/or heard these species:

Colaptes cafer

Aphelocoma coerulescens

Cyanocitta stelleri (very dark head, ^{immature}whitenerals)

Pipilo fuscus

Pipilo erythrophthalmus

Zonotrichia coronata singing

Zonotrichia leucophrys

Junco oreganus

Tamus inornatus

Melospiza melodia

Tamus rufescens

Dendrocopos pubescens

californicus

Thryomanes bewickii

Above the field across the creek:

Sturnella neglecta

Chamaea fasciata

An Accipiter (probably velox) made a low pass just at the edge of the woods. Didn't get anything. The Juncos feeding in the open immediately returned to cover, but the danger was past before they realized (by hearing the alarm notes of the other birds, I guess) that it was present.

A boy went over the hill quail hunting.

While up in the woods, heard a Buteo borealis screaming over the open fields nearby.



Barber
1956

Journal

49

1.8 mi S, 1 mi E. Orinda, 750± Contra Costa Co., Calif

22 Nov. This is a nice stand of broad leaved sclerophyll forest. *Quercus agrifolia* predominates but there is a lot of *Madroño*, some Bay. Brush is heavy in the openings, and is fairly heavy under the trees. The slope is pretty steep. Birds are scarce here in the woods, although I can hear a few; cannot attract them in. Continued in woods for a ways, crossed a fence into pastured woods. Hit an old road, went out into field. Saw *Passerella iliaca*. Out in sun, could see many jays, and other birds. Saw a *Lanius*. Varied Thrush (*Ixoreus naevius*) on up a ways. Shot a ~~the~~ *Sayornis* out of a live oak tree. Saw a *Buteo lagopus*. No doubt - Saw mist patches, rump patch. Had long tail, narrow wings for a *buteo*. Circled several times, then drifted off in a SW direction. A little later, and farther up, shot a *Sitta carolinensis* out of a live oak. Also saw here *Vireo huttoni*, I think. ~~the~~ Moved on to another patch of woods, shot & missed an *Aphelocoma*, but shot a *Junco* and 2 *Parus inornatus*. Walked back in field along edge of woods. Birds had quieted down a lot, by now (near noon). Missed 2 more jays. Very pleasant day.

Smith
1956

Journal

50

24 Nov.

Marin Co., Calif. - (various pts.)

Left Berkeley with C. Thaler at 0615. Went across
Richmond-San Rafael Bridge. Between bridge and
San R. stopped and saw:

Squatarola squatarola 6±
Ereunetes mani 225±

— *semipalmatus* also Killdeer

Larus occidentalis

Larus philadelphia 4+

Recurvirostra americana 60±

Fulica americana

Anas aya (Pintail)

Catoptrophorus semipalmatus 15±

Limosa fedoa 15±

~~Alpina~~ *Erolia alpina* 75±

Oxyechus jamaicensis (Ruddy) 50+

Aythya valisineria (Cowanback) 15+

Along Rt. 101, near turnoffs for Sausalito,
saw:

Pelecanus occidentalis 15±

Larus argentatus

Eared Grebe 4

Western " 4

Pied Billed " 1

American Goldeneye 1
Bufflehead lots (50+)

Great Blue Heron 1

Spotted Sandpiper

Red Breasted Merganser.

North of turnoff for Rt. 1 added

Snowy Egret

American Egret

Ring Billed Gull

Baldpate

Banks
1956

Journal

51

Marin Co., Calif., cont'd.

24 Nov.

Shorelark

Crow

House Finch

Having trouble with gulls and cormorants.

Also seen:

W. Meadowlark

Killdeer

at Marin Beach didn't see anything new.

N. of Sausal Beach, a group of Least Sandpipers. Also some eared grebes & both egrets. Lots of Killdeer.

Here along Bolinas Lagoon we added

Long Billed Curlew

Horned Grebe

Song Sparrow

Redwing

Brewer's Blackbird

Many more Red Backed Sandpipers, Goldeneyes.

Belted Kingfisher

Turkey Vulture

Inland toward Tomales Bay seen

Song Jay

Red Tailed Hawk

Sparrow Hawk

Shrike

Brown Towhee

Along Tomales Bay saw a lion sp? and

Sanderlings 30-35, 1 flock

Lesser yellowlegs

Surf Scoter

Ruby Crowned Kinglet

Lot more Pintail.
Canwarbach

Short Billed Gull

Black Phoebe

Western Bluebird

~~Ruby Crowned Kinglet~~

~~Baldpate~~

Flücker

Junco (Oregon)

1956

Journal

52

Marine, Calif

24 Nov.

Proceeded to Pt. Reyes. On the way saw:
Starling — with blackbirds.

Golden Crowned Sparrow

Several Red Tailed Hawks

" Sparrow Hawk

Sharp Shinned Hawk

At the point watched sea birds for a long while. Quite a number of birds, many too far out for positive identification.

White Winged Gull

American Gull.

Rhinoceros Auklet ?

Holboell's Gull ?

Ancient Murrelet ?

Glaucous Winged Gull

Glaucous Gull ?

Benich Wren

White Crowned Sparrow

Loons — Red Throated ?

Old Squaw ?

Banks
1956

Journal

53

Dec. 1 - 2, 1956

Gray Lodge Wildlife Refuge, Butte Co., Calif.

Left Berkeley about 8 AM Sat Dec. 1 with Zoo 136 (Ornithology) field trip, Dr. Miller in charge. 11 people on trip. Took Rt. 40 to near Davis, turned off to Woodland. Saw a flock of Long Billed Curlew along Rt. 40. South of woodland picked up a DOR Falco sparverius. North of Woodland picked up an Acorn Woodpecker, then later a Red Tailed Hawk. As we neared Gray

Lodge we could see in the distance huge flocks of Geese and ducks. At a small pond at the edge of the refuge saw Red Backed Sandpiper, Least Sandpiper, Dowitcher, Greater Yellow legs, and Coot. Arrived at the refuge proper about 12:30 or 1 PM. and immediately saw more Snow Geese than I ever knew existed. Acres and acres of flat marshy land were just covered with Snow Geese and Pintails, with White Fronted Goose and Baldpates sprinkled in. After lunch we looked at a group of captives in a cage, and observed them for field marks, etc. There were here Whistling Swan, Fulvous tree duck, Rare Goose, Snow Goose, Canada Goose (2 races) Baldpate, Shoveller, European Widgeon, White Fronted Goose, Ring Necked Duck, Redhead, Wood Duck, and possibly others. Took a walk thru part of the refuge, down dikes and along the edge of the refuge. Flushed lots of Ring necked Pheasants. Red Tailed Hawks were abundant. Saw Sandhill Cranes flying and feeding in flocks of 50+, with the



Banks
1958

Journal

54

Dec. 1-2, 1956

Gray Lodge Waterfowl Refuge, Butte Co., Calif.

Characteristic gurgling flight sounds. Some indulged in a little dancing on the ground, but not much. Snow and White Fronted Geese, occasionally rose by the ~~hundreds~~ of thousands, circled and sat back down. Even with these huge numbers it seemed only a small part of the birds flew. Pintails, in the open shallow water rose by the thousands also, and Mallards in equally large numbers flushed from the cover of the tules and rushes. Almost invariably the Pintails were in open water, Mallards in the edge cover. Baldpates were fewer in number, but still common, and were mainly in open water. Shovelers were fewer yet, and were mainly at the edge of the tules + cattails, often going in and out. Teal occasionally flushed with the Mallards, flew straight away so as to hide field marks. I didn't get a positive make on any Teal, ~~at~~ although Cinnamon were identified by others. Coot were everywhere, in all the open water, canals, and sloughs, and feeding on land. Canada Goose were scarce. Saw a small flock flying, and 2 on the water. Dead birds, mainly Pintails + Snow Geese, were commonly found lying around. Evidently they had been wounded, and had returned to the refuge to die. Signs of birds eaten by predators were fairly common. Some of these were probably dead + eaten by scavengers.

Dec. 1-2

Gray Lodge Waterfowl Refuge, Butte Co., Calif.

There were a few Ruddy Ducks on the refuge also. I pulled heads off many of the ducks and geese to make skulls. Don Medina and I each brought a Snow Goose back. Drove over some roads in the refuge just before sundown. By now the geese were beginning to leave in great flocks, mostly headed east, presumably to feed. This movement continued until long after dark.

Sun. morning about 9 AM we again walked over a good bit of the refuge. Aside from flushing more Pheasants (probably several hundred) the scene was about the same. Saw several crippled ^{ducks} birds. 2 Donitchers and a Least Sandpiper were along the edge of the refuge, along with some Killdeer. Gathered more heads, for skulls. Picked up a Badger for a museum skeleton. Saw a young Golden Eagle from far off, in a tree, and worked up to 50 or 20 yards before it flitted. Saw a number of Turkey Vultures, some with wings outspread, sunning. Dr. Miller + some others saw 3 Whistling Swans but I missed them. Left the refuge about 2 P.M., drove over back roads of the Sacramento River valley. Saw a Rock Wren on a fence made of the lava rock of the Marysville Buttes. Saw several Bronzing Omb. Picked up a Coot in good shape. See species accounts for many birds listed.

Sanks
1958

Journal

56

Dec 1-2

Gray Lodge Waterfowl Refuge, Butte Co., Calif.

Species List for trip:

Pied Billed Grebe

Great Blue Heron

American Egret

Snowy Egret

American Bittern

Canada Goose

White Fronted Goose

Snow Goose

Mallard

Baldpate

Pintail

Shorelorn

Ruddy Duck

Turkey Vulture

Red Tailed Hawk

Golden Eagle

Marsh Hawk

Sparrow Hawk

Ring Necked Pheasant

Sandhill Crane

Virginia Rail

Florida (Black) Gallinule

Coot

Killdeer

Wilson's Snipe

Long Billed Curlew

Greater Yellowlegs

Least Sandpiper

Witcher

Mourning Dove

Belted Kingfisher

Flicker

Red Backed Sandpiper

Burrowing Owl

Banks
1956

Journal

57

Dec. 1-2

Grey Lodge Wildfowl Refuge, Butte Co., Calif.

Acorn Woodpecker

Whitell Woodpecker

Black Phoebe

Tree Swallow

Scrub Jay

Yellow Billed Magpie

Crow

Long Billed Marsh Wren

Rock Wren

Western Bluebird

Ruby Crowned Kinglet

American (Water) Pipit

Loggerhead Shrike

Starling (1)

Western Meadowlark

Red Wing

Brewer Blackbird

House Finch

Common Goldfinch

Savannah Sparrow

White Crowned Sparrow

Song Sparrow

56 species. Dr. Miller said the Tree Swallows, seen at the Refuge Hq., were rare there. The Marsh Wren was singing quite loudly.

Others we could or should have seen: Short eared owl; night herons; Gadwall. Ross Goose; teal (saw, not identified); Rough legged Hawk; Whistling Swan; Tree Toads. Didn't look for land birds. Undoubtedly could have seen many more sp. if we had tried.

Banks
1956

Journal

7 Dec. 56 MVZ - under direction of W.C. Russell, put up a Pomarine Jaeger and a Green Winged Teal. F.S.L. Williamson sent them down from Alaska as salted skins. Here they were relaxed and soaked in gasoline overnight, having been ~~cut to~~ scraped to get grease off the skin.

24 Dec.

1.8 mi S., 1 mi E. Orinda, 700 \pm ft. Contra Costa Co., Calif.

Arrived at 3 P.M. Just a little ways up creek shot one of 3 Varied Thrushes out of an ^{Brugger} Umbellifera. Took 3 shots, and it is a mess. A little later shot another from the same kind of tree, it fell 40 \pm ft. into the stream bed. A lot of feathers drifted away as it fell, & when I picked it up the entire rump was bare. Will make a skeleton of it. (Saved skull only, #147.)

Banks
1957

Journal

①

21 Jan

Berkeley, Alameda Co., Calif.

Left Berkeley approx. 8:30 P.M. from Walt Muhlbach's. Mileage 14550. Traveled to Walnut Creek, + Rt. 50 to pick up Rt. 99 South. Chowchilla, Madera Co., Calif.

Mileage 14700 11:30 P.M. Coffee break approx. $\frac{1}{2}$ hour. Charlie drove

22 Jan.

Bakersfield, Kern Co., Calif.

Mileage 14850 3:30 A.M. Coffee Break approx $\frac{1}{4}$ hr. Walt drove.

Colton, San Bernardino Co., Calif.

Mileage 15027 Stopped for breakfast at 8:00, for about $\frac{1}{2}$ hr. I drove from here to Perris area - We arrived in the area here about 9:00, drove around Lakeview Mt. The area is pretty heavily cultivated, up to the bases of the hills. The hills are very rocky, covered with sage + scrub. There are very few small areas of flat or fairly flat land with either native grass or scrub. Found a plaque marking an Indian ~~the~~ Maize Rock. Now going north on Warren Rd, N. of Rt. 24. Have seen Raven, Say Phoebe, Horned Lark, House Finch, Savannah Sparrow, Sparrow Hawk. On a little pond saw Ruddy Duck, Wren, Pied Billed Grebe. Farther on saw a Marsh Hawk. On Bridge Rd. at a very small puddle saw 4 ♀♀ + 1 ♂ Green Winged Teal.

Badlands, 1850 ± ft., 1 mi. W. pt. 60 + 79, Riverside Co., Calif.

In this dead end canyon we found Calif Quail, Raven, Gnatcatcher, Bush Tit, Brown ~~Tree~~ Towhee, and

Banks
1957

Journal

2.

Expense Record

Gas		Food
10.00	Dick	10.00
10.00	John	10.00
10.00	Walt	10.00
10.00	Charlie	10.00
2.00	Charlie	
2.00	John	
2.00	Walt	
2.00 ±	Dick	

(Some leftover food money applied to gas.)

Baird
1957

Journal

3.

21-22 Jan

Berkeley	Start trip	14550		
Madera		14714	13.2	4.90
Lancaster		14948	17.2	4.97
Palmdale	(gastank cap)			.55
Moreno		15113	12.0	4.20

24 Jan.

Kamer Springs		15295	13.3	5.10
Alma Caliente		15340	2.0	.62
"	white gas			1.50

29 Jan.

Indio		15544	17.2	6.50
Mohave	30 Jan.	15735	14.5	5.33
Madera		15935	14.1	5.22
Berkeley	End trip.	16100		

1550

miles

gal.

cost.

+ grease, oil change, etc.

\$

Banks
1957

Journal

4

22 Jan 1957

Badlands, 1 mi. E. Jct. 60+79, 1850±ft., Riverside Co., Calif.

Say Phoebe. Ate lunch. Set 60 traps (mus sp.)
John Ondrias + Walt set 40 traps in a side
canyon; Charlie set 20 in another; I set 4 rat
traps near a wood rat house. ^{Saw some} ^{skunk} ^{chick.}

S. side Mt. Purser, 1800±ft., Riverside Co., Calif.

Set 5 Schyler traps in rocks about at top of
hill (Charlie + I). John + Walt set ~~50~~⁴⁸ traps, Charlie
+ I set 45. John + Charlie set 25± at about 1550 ft.

Set up camp here. After dark drove
looking for Dipodomys and Peromyscus, but
although we saw many we caught only
1 Peromyscus, near the low trap line.
Got home and to bed about 10 P.M.

23 Jan 1957

Slept in until about 8 A.M. Had breakfast
immediately. Our traps here are in an open
sage area on very rocky (granite) hillsides.

Checked traps. Charlie + I had 2 Dipodomys

1 Perognathus, two species of Peromyscus ()

In the Schyler traps had 2 Neotoma.

In the lower trap line Charlie picked up

1 Perognathus, 12 Peromyscus, 2 Dipodomys.

Shot at this lower elevation 2 Rufous-
crowned Sparrows, Aimophila inflexa.

Badlands, 1 mi. W. Jct. 60+79, 1850±ft., Riverside Co., Calif.

Pulled our traps here but reset some in
black-bushing bushes for Dipos, where
John + Walt caught some. Charlie had 1
Peromyscus; I had 1 Peromyscus californicus.
Charlie + John set 19; Walt + I, 26. Also 4 rat
traps at rat houses.

sub
1957

Journal

5.

23 Jan 1957

S. Slope Mt. Russell, 1850 ± ft., Riverside Co., Calif.

Back at camp at noon. ~~Perhaps~~ started to rain so we began to make skins in the car. After supper drove to San Jacinto, where we stopped at the Elms Motel + put up skins until midnight. Total skins for day: 21 mammals.

24 Jan 1957

Got up about 7 AM. Charlie started on some left over skins; Walt, John + I checked and pulled all traps we had out. Got 4 Neotoma, 2 Peromyscus in the Badlands.

In the line Charlie + I had set at Mt. Russell, we got 1 Dipodomys down low, 1 Perognathus and 2 Peromyscus on the higher, rockier slopes. Both these Peromyscus were the short tailed variety. Got 2 Perognathus, 1 Dipodomys, and several Peromyscus at the 1550 ± elevation. Went back to the motel + put up skins. Left the motel about 4 PM, driving south to San Diego Co. It was raining all this time, but we ran into good weather shortly in San Diego Co. Slept around an airstrip near Agua Caliente. Charlie caught 1 Lepus in a short line.

25 Jan 1957

Eggers, Cane Brake Canyon, 1200 ± ft. San Diego Co., Calif.

Left our temporary camp about 10 AM. Drove into Cane Brake Canyon where we met Mr. Egger, who has a cabin. He does some collecting for San Diego Zoo + Mus. + Museum of Man. His full address at his home in National City is: J. L. Egger, 43 L St., National City, Calif. Phone GR 79660

He was very hospitable - opened his daughter's cabin for us to stay in. Also gave us some of

Bahr
1957

Journal

6

25 Jan 1957

Eggers, Cane Brake Canyon, 1200 ft. San Diego Co. Calif.
his home brew. Mr. Egger gave us the run
of the place - anything goes. He had to leave
to return to town, but said to stay as long
as we want and come back anytime.
A Very hospitable gentleman. We
settled down and finished a few left over
shrimp. This canyon is a very narrow
rocky canyon, sparsely vegetated with
sage and Ocotillo ().
Also some cactus around. There are quite
a number of cabins in the area - evidently
weekend cabins or vacation camps. The
canyon runs about SW-NE. In the wash
where there is (probably) occasionally some
water there are some mesquites. Right
away we saw some hummingbirds, (sp?),
Robin, Sialia mexicana, and Phainopepla
nitens. The weather today is very nice -
warm when the sun shines but cool when
it goes behind clouds. We will stay here
several days. About 1 P.M. shot a Dendroica
auduboni and an Opornis tolmiei out of a
Cottonwood tree. On main road about
 $\frac{1}{2}$ mi. NW of Cane Brake Canyon, shot a
Sage Thrasher, Put it up later, while others
did mammals. Set traps.

26 Jan. 1957

Checked traps here this morning. John + I
had, out of about 100 traps, 6 Peromyscus (2 sp)
1 Neotoma, 1 Perognathus. Walt had nothing
in steel traps. Charlie had 6 Peromyscus. Then
we checked desert traps, had 1 Dipodomys. Went
to Sea Palms for morning.

Banks
1957

Journal

26 Jan 1957

Tres Palmas, Vallejo Valley, 9000 ft., San Diego Co., Calif.

This area is about opposite the mouth of Cane Brake Canyon, across the valley floor, 2 miles or so, along the foot of a badlands area. The area is a line of trees, intermittent for about a mile - Mesquite mainly. There was some water today, probably more other times.

Phainopepla nitens and Sialia mexicana were very common - large flocks of each. Saw also a few Oreoscoptes montanus. Heard Coyotes on the way over. Charlie saw a sage sparrow. Another bird we heard singing we couldn't see or identify. Turdus migratorius also present, not in large numbers. We shot 3 Phainopepla, 5 Sialia, 1 Zonotrichia leucophrys, and 1 Spizella breweri (?) (Sawed head only).

Walt shot a Dendrocopos scalaris on the way, first seen on Opuntia, then on Yucca. We stayed here until noon or later. On way back set 12 gopher traps at mouth of Cane Brake Canyon, on main road. In afternoon and evening until midnight, put up skins. I did nothing but birds, and so did John. Charlie + Walt did mostly mammals, 1 bird each. We also had 2 imm. Zonotrichia leucophrys caught in our trap line. Got cool tonight, was fairly cool all day.

27 Jan. 1957

Eggers, Cane Brake Canyon, 12600 ft., San Diego Co., Calif.

Checked traps early this morning, had 1 Perognathus, 2 Peromyscus. Later today had another Peromyscus and a Melospiza lincolni. The bird was the first animal in the canes, along the water. The Peromyscus in the afternoon was probably missed

Banks
1957

Journal

8.

27 Jan 1957

Eggers, Cone Brake Canyon, 1200± ft., San Diego Co., Calif.
earlier. It was cloudy with intermittent rain all day. Walt had 2 grey foxes (Urocyon) in Mr. Egger's steel traps. Charlie had 1 Citellus leucurus, 1 Perognathus, 3 Peromyscus.

Vallejo Valley, 900± ft., San Diego Co., Calif. ^{mouth of} C.B. Canyon.

We had a few gopher traps set here along the main road. Had 1 ♀ gopher this A.M. Charlie + I set them again, a total of 20 traps. Later had another ♀. I did one, Charlie the other. Nothing in the desert trap line today.

Tres Palmas, Vallejo Valley, 900± ft., San Diego Co., Calif.

John + I set 25± mus. sp., 3 Skyline traps in the desert floor near here. Walt set 3 steel traps. This was late in evening, just before dark. It was cold, raining hard part of the time.

Eggers, Cone Brake Canyon, 1200± ft., San Diego Co., Calif.

Charlie did most of the skins today. Walt skinned out one fox, I did the sparrow and the gopher. Observed a Costa's Hummingbird rather closely. Saw Rubin Phainopepla, Western Bluebird, ~~and~~ around here. Set gopher traps.

28 Jan. 1957

Checked traps here this AM. Had 1 ♂ Thomomys, 2 Peromyscus. It had rained in the night, hard part of the time. Went to Tres Palmas about 9:30 to noon. In ~~the~~ the afternoon did skins, then about dark shot a Carpodacus mexicanus and an Amphispiza nevadensis. Put them up in the evening. The gopher, #170, was a very large ♂.

Banks
1957

Journal

9.

28 Jan. 1957

Tres Palmas, Vallecito Valley, 9000 ft., San Diego Co., Calif.

Spent a couple hours here trying to shoot some birds we missed the other day. Charlie got a Verdin, I shot a Snaticatla (P. caerulea) which I didn't put up, and an Oreoscoptes. Western Bluebirds and Phainopepla still present in large numbers, seemingly more Bluebirds than before. Walt saw a Cinnamon Teal. We saw about 25 Canada Geese flying over, 4 separate and 21 in a V. Saw Mockingbird, Robin, and Sage Sparrow. Charlie shot and lost an Audubon warbler. In our traps had 1

*

Dipodomys. This place is also called Mesquite Oasis.
Vallecito Valley, north of Landrake Canyon, 9000 ft., San Diego Co., Calif.

Got a total of 4 Thomomys out of this area today. Set all 22 traps around here.

Eggars, Cone Brake Canyon, 12000 ft., San Diego Co., Calif.

When we got back about noon there was a Salpinctes in the cabin. John ruined the skin.

Also a Sayornis saya flying around. In

P.M. shot a Passerella iliaca too bad to

make a skin. Got Carpodacus + Amphispiza

29 Jan. 1957

It snowed during the night, and 200 ft. above us the ground was white.

It did not stick here, but snowed very hard for a while. Charlie + I checked

our trap lines - neither had anything. A lot of junco Oreganus around - probably

forced down from above by cold weather. Charlie + John cleaned up while Walt + I

got traps from Tres Palmas and the desert floor. Our total take over night was

1 Perognathus, at Tres Palmas. Left at 2:30 P.M.

3 Jan
1957

Journal

10.

29 Jan 1957. Mileage 15422.

Left Eggers 2:30 P.M., drove back to Rt. 78 (Scissors crossing). Had rough time with snow over 2000 ft. Went west on 78 to Salton Sea, back to San Bernardino. Chains needed at Cajon Pass, nearly to Mohave.

30 Jan 1957

Arrived Berkeley about 8:00, Charlie + I finally home at 9:00. Mileage 16000

Resumé of Trip

Bird list for trip:

Sturnella neglecta

Circus hudsonius

Lanius ludovicianus

Buteo jamaicensis

Falco sparverius

Pipilo fuscus

Corvus corax

Corvus brachyrhynchos

Mimus polyglottos

Turdus migratorius

Sayornis saya

Polioptila caerulea

Lophortyx californica

~~E~~ *Eremophila alpestris*

Passerculus sandwichensis

Fulica americana

Pelecanus

Anas

Anas carolinensis

Psittiparus minimus

Spinus sp.

Aimophila ruficeps

Phainopepla nitens

Banks
1967

Journal

u.

Resume' of trip
Bird list, cont.

Sialia mexicana

Dendroica auduboni

Vermivora celata

Zonotrichia leucophrys

Oreoscoptes montanus

Carpodacus mexicanus

Passerella iliaca

Amphispiza nevadensis

Melospiza lincolni

Auriparus

Dendrocopos scalaris

Dendrocopos pubescens ?

Geothlypis trichas

Junco oreganus

Apelocoma ^{caerulea} ~~color~~

Branta canadensis

Coturnix coturnix

Seen by others, not by me:

Herps:

Hyla, in Cane Brake Canyon.

Sceloporus (by Walt; I saw some lizard.)

Banks
1957

Journal

Specimens from trip:

Neotoma fuscipes macrotis

CST 167; PCB 159, 158; JCO 23. WLM 3.

Neotoma lepida gilva

CST 156. PCB 150.

Perognathus fallax fallax

CST 157, 163, 164; PCB 157.

Perognathus spinatus rufescens.

CST 170, 183

Perognathus penicillatus angustirostris

CST 179, 190

Banks
1957

Journal

12.

16 Feb. 1957

U.C. Campus area, Berkeley, Alameda Co., Calif.

From 0730 - 0900 looking at Zonotrichia and Melospiza. White-crowns seem to be on territories, as do song sparrows, but most singing birds seem to be unmated. This was a poor day to start investigating; it was foggy + wet, almost misting part of the time. Very dark, also. Singing was not in evidence as much as it has been during the week.

22 Feb. 1957

Tacoma, Marin Co., Calif.

Here with Jay Schnell helping to map a plot of broad-leaved sclerophyll forest for his work with Pitelka. The area is on S. side of road. The forest is largely Ulmella with Quercus and Arbutus higher up. There are a few conifers. We measured a parallelogram 435.6×577 ft. to get a plot of 5 acres. Began to rain in P.M. about 3:15, + we finished about 4:15, still raining. Jay put out 2 rain gauges. Put some kerosene in the jar to prevent evaporation. Used quart jars with 5 inch funnels. Didn't get a chance all day to look at birds. Mapping + plotting took about 4 hours.

9 March '57

Berkeley, U.C. Campus, Alameda Co., Calif.

Looking for activity of Zonotrichia around campus. See Z. leucophrys, Falco sparverius, Hylocichla guttata, Melospiza melodia.

Banks
1957

Journal

13.

16 March 1957

Strawberry Canyon, Berkeley, Alameda Co., Calif.

Led Zoo 113 field trip looking for birds. Went from parking lot ~~W~~^S of Bowles Hall up S.C. Drive, cut off to right (to S.) just below Botanical Gardens. Ended on Panoramic Way. 4 hr. trip. Nothing unusual but good looks at several common birds.

U.C. Campus, Berkeley.

Looking for Song Sparrows + White Crowns. See sp. acct's. ^(P.M.) Got real cold about 6 P.M.

I was out from 5 P.M., home about 6:20.

22 March 1957

Campus area, Berkeley, Alameda Co., Calif.

From 6:20 - 8:00 A.M. looking for White-Crowns. Again from 8:15 - 9:00 A.M. Found two nests.

23 March 1957.

Out about 6:30, around campus area until 10 A.M. Spent 10-10:30 watching Mourning Dove build nest in Magnolia tree outside home, 2214 Haste. Found White crown nest C, empty.

24 March

0700-0745 around campus, checking on nests. One observation on Mourning Dove. Bright + Sunny today.

25 March

0630-0830 Around campus. Found another ^{white crown} nest. Rather dark + cloudy today.

26 March

Checked all nests this A.M., 7-8.

27 March

0615-0830. Spent some time on Melospiza, checked all White Crown nests.

Banks
1957

Journal

14.

28 March

U.C. Campus Berkeley, Alameda Co., Calif

Checked nests, found no change. 7-730 A.M.

29 March

Checked White Crown nests - no change. Looked at some song sparrows. Found Robin feathers. Found White Crown egg shell. 0630-0845. White Crown nest C had 4 eggs today.

30-31 March.

Mary Taylor checked nests A+B for me today in the morning at 0700. Found 1 young hatched at Nest B. Jay Schnell checked ^(30th) in the afternoon and morning of the 31st. Nothing new. In the afternoon I checked, and weighed the bird at 1800±. An egg has gone.

1 April

No more change, except C has another egg.

3 April

Have total of 8 nests by now, but only one good one. 3 with young birds, 2 deserted, 1 with eggs, 1 just robbed, and 1 should have eggs. 6 *Zonotrichia*, 2 *Melospiza*. Nest B is only one with known age young now.

4 April

Since P.M. on 1 April, have been using balance devised with much help from Don Isaacs + Dick Bugbee in the Zoo Dept. Storeroom. It is a Braun-Knecht-Heimann hand balance (this one belongs to Ralph Barth, mine will replace it soon), mounted by a piece of Plexiglas to an electric plug (♀) which can hook on to a ♂ plug soldered on to a ^{metal} plate screwed into an old microscope box.

Banks
1957

Journal

15.

~~10~~¹⁰ April

U.C. Campus, Berkeley

Bill Nisbet used balance today to weigh Hummingbirds (all) for Zoo 113 project.

12 April.

Rained during the night, and rained pretty hard at 6 A.M. today as I was en route to school. I did some field work from 8-9, but very little. Got a key from the Athletic Dept., courtesy Mr. Englehard, for the track stadium.

13 April

Around campus 6-9, then to Tilden Park till 10:30, back to campus. No luck in the park area. In P.M., collected a hatching *Zonotrichia leucophrys*. It was pipped in A.M., but in P.M. was still half in shell.

14 April.

Rained last evening + night, but streets were dry (\pm) this A.M. + it was pretty well breaking up. by 0700.

16 April

Began to rain in afternoon, and was still raining hard at 6 P.M. I did not check my nests at this time.

17 April.

Dark + overcast in morning. Heard a bird singing at 0500 hrs. at home. Found nest J.

In the afternoon came a sudden hard rain with hail. Overcast and dark at 5:30 P.M. Will be dark early tonight. At 6 P.M., while working on Nest C, began to rain. Skipped J.

Banks
1957

Journal

16.

18 April 1957

U.C. Campus, Berkeley, Alameda Co., Calif.

Weighted the birds again. It rained off and on all night, all nests were wet. Nest C were all dead.

1.8 mi. S, 1 mi E Orinda, 750 ± ft., Contra Costa Co., Calif.

Visited this area to get some alcoholic material for Anatomy project. Shot an Aphelocoma caerulescens and an Agelaius phoeniceus (Redwing) which I preserved as alcoholics. Also shot a Vireo gilvus and one of a pair of Sialia mexicana, saved for skins. Put up the Vireo in the P.M.

U.C. Campus, Berkeley, Alameda Co., Calif.

Has been pretty fair day today, some cloudiness thru morning.

20 April

Rained during the night, and was rather cool. - still is now at 0545. Overcast. Sprinkling slightly while working at Nest G. in A.M., 0615. Overcast with sprinkles, cleared up + sun came out late in afternoon.

27 April.

Spent 3 hrs. in A.M. putting up a homer and that Ray Pickman brought in.

28 April.

Daylight savings time began today. Although hours indicated at nest checking time are later, "sun time" is same as before. Clocks turned ahead.

29 April

Dark early this evening, due to fog. Unusual observation on scrub jay.

Today, after 2 very warm days, was fairly cool. Also cool tonight.

Banks
(1957)

Journal

15

1 May

U.C. Campus Area, Berkeley, Alameda Co., Calif

Rained overnight, probably late in morning. Still raining at 0620 when I left home, a little harder (but still not hard) at 0640.

2 May

Rained overnight, everything wet this morning. Cleared + sun out around 0700. Warmed up nicely during day.

3 May

Drove to Hopland, Mendocino Co., with Charlie Thader. Left 1045, Ret. 2030, Nice day. Returned too late to weigh birds, altho we had planned to get back earlier.

8 May

It was pouring rain when I got up at 0515, so I decided to skip the morning weighing. However by 0630 it was stopped, and cleared into a beautiful clear sunny day. Turned cloudy and rained again before noon. Cloudy, cool, rain off and on all afternoon.

9 May

Rained during the night. Cool this morning, and overcast. Began to rain as I left the house at 0610, rained until at least 0645.

12 May

Misting this AM while weighing Nat L.

13 May

Raining some while working on Nest L. Overcast, rained more or less all morning.

Banks
1957

Journal

18

20 May 1957

UC Campus, Berkeley, Alameda Co., Calif.

Started to rain about 2100 hrs. 17 May, has rained almost steadily since. Stopped for a while on 18 May in evening, and rained more during that night. Stopped in A.M. on 19 May, but rained off+on all day, stopping along in evening. ~~Has~~ Rained more during night of 19-20, and today hasn't stopped more than a few minutes at a time. At 1300, still raining.

21 May

Continued raining until sometime in the middle of last night. Today dawned bright + sunny, but I skipped my weighing.

24 May

This day was overcast and fairly cool, with a hint of an attempt to rain. Quite in contrast to last few days of bright warm sunshine.

25 May

This day is starting the same as yesterday. Cleared up by noon.

31 May - 2 June.

Beautiful warm sunny days.

3 miles
(1957)

Journal

19.

8 June.

Left Berkeley 0700, Mileage ~~229.6~~, 44045.
Stopped for lunch about 1115, above 6000 ft.,
before Sonora. Our route so far has been 50
to Manteca, 120 to Yosemite Jct., 108 here
+ over Sonora Pass. We are eating under
Incense Cedar, White Fir, Sugar Pine + Jeffrey
Pine, Willows in seep across road.
Stanislaus River below us. Western
Tanagers + Wright Flycatcher around.
Also O. junco. Started again at 1145,
Mileage 44224, At Fales Hot Springs, 7000±
saw Rock Wren w/ nesting material heard
Brewer Sparrow, saw + heard Pipito Green-
tailed Towhee. Near Mono Lake, saw
Black-billed Magpie.

9 Mi. E Jct. 395 + 120 Mono Waters, Mono Co., Calif.
A dry area with a large open stand of
Jeffrey Pine. Set off looking for Empidonax.
Shot a Geothlypis richardsoni out of a
Jeffrey Pine. Saw 2 chickadees. Saw a
pair of Clay-colored Vireos. Also saw a
Pygmy Nuthatch, and a Woodpecker,
probably Hairy. 2 miles on S. side
of 120, Ned went on north side. He
shot an Empidonax griseus and a
Long-eared Owl. Also he saw Pinion Jay,
Western Tanager, Mt. Bluebird, Blue-Gray
Gnatcatcher, Lewis Woodpecker, Bush-tit,
Rough-winged + Violet-green Swallows. Both
saw Red-shafted Flicker. We were in
this area about 1 1/4 hrs.
Drove on E on Rt. 120, Went down road
pointing toward Black ~~Tr~~ Canyon. It was

8 June

a dead end road. Returned + followed a road along the ridge which pointed toward Sawmill Meadows. This proved to be a dead also - it lead into an area very recently logged. Took a road to W of here, and ended up camping at this location.

N. Slope Glass Mt., 9 mi W. Benton, 8500 ft., Mono Co., Calif.

This is an area of Jeffrey pine, logged several years ago. Undergrowth is mostly low sage (*Artemisia*), scrub growth. Got here about 1800 hr., had chow + were ready to go to work by 1900. We went owl hunting. Tried to call in Flammulated and/or Pygmy Owls, but had no luck - didn't get the least response. Much of the area is new growth, 15-20 ft., but there are a number of larger trees. As we left camp to hunt, about 1900, I shot one of 2 Pygmy nuthatches (*Sitta pygmaea*) out of a Jeffrey Pine. Didn't do any skinning tonight, hope to in morning. Got back to camp about 2100, wrote notes around fire. About 2145, began to sprinkle some. Lasted only a few minutes, long enough to scare no. Heard (faintly) a Poor-will. Pretty windy all evening, but wind died down about time rain came.

9 June

Sprinkled a few times during the night. Ned woke up once with hail.

In the morning at 0530, I awoke to the song of a Mt. Chickadee. We were through breakfast by 0630, and

9 June

9 mi. W Benton, N slope Glass Mt., 8500 ± ft., Mono Co., Calif.
set out hunting. The weather is very poor.

It is cloudy & overcast, with the sun only occasionally breaking through, and very windy. A lousy day for collecting. In over 2 hours I couldn't get close enough to anything worth shooting. Saw the following: Mt. Chickadee, Oregon Junco, Wright Flycatcher, Clark Nutcracker, a warbler, and some unidentified things. Shot at a Wright Flycatcher, missed. That was my only shot. While waiting for Ned to return to camp, I found a Mt. Chickadee nest. See sp. acc. During the morning it was snowing on the ridges around our camp - the White Mts., in the distance, ~~was~~ ^{were} apparently getting quite a storm. Lousy weather. During the morning Ned shot 3 Empidonax wrighti. About 1000 we left this place, went to

Mount's Place, Mono Co., Calif.

Here we put up the birds we had. Ned did his Grey flycatcher from yesterday, and 2 Wright's. I did his owl & my Contopus. Left here about 1330, headed East. At this place, where there is an old building, we saw Empidonax traillii, Spizella breweri, Thryomanes bewickii.

From here proceeded to Benton, Bishop, across Westward Pass, through Deep Springs Valley, to Oasis, and into Nev.

Saunders
1957

Journal

22

9 June

Indian Springs, N. side Mt. MacGhee, 7300 ft., Esmeralda Co., Nev.

It was raining when we entered Nev. In about 1 mile we saw Joshua Trees. Did not see any birds for long ways. Pretty soon came to Pinion, which became thicker the farther we went. Most of the low area is just sage scrub, with the pinon on the slopes. It got very tall & big some places. We drove in around Pigeon Springs, the rain was about over. There is a trailer here, & the mine is working. On down the Pigeon Springs road there are numerous roads & cabins, occupied, and thus not available for us. The canyons around here are very thickly covered with Pinon, with sage understory, of course. We drove on and spotted a group of unused "buildings" here at Pigeon Springs. There is a spring, with a little pond, and a good roofed small building which we camped in. Also a sideless house, 2 underground rooms, and a useless shed. We had to park on road and pack in, perhaps 150 yds. Got here 1800, had camp set up & supper over at 1930, the sun came out & it looked good in the west. But clouded up again later. Just about sunset we went owl-hunting. Had not gone very far when we heard people talking. On way back we heard Poor-will, and a Screech Owl, Otus asio. This latter was at 2030. It could not call it in. Very windy, quite cold. Got back to camp

Banks
1957

Journal

23

9 June

Indian Spring, N. Mt. MacGuder, 7300 ft., Esmeralda Co., Nevada
at 2400. Shortly ~~there~~ thereafter it began to
rain, and really cut up a storm - thunder
and lightning to the west, heavy rain and
some hail here. We were inside, with
lantern + stove going, still cold, even with
a makeshift door keeping out most of the
wind. While getting supper we noted
lots of birds here: Blue Gray Gnatcatcher,
Bush-tit, Brewer Sparrow, Bewick Wren,
Pinon Jay, House Finch (?). Earlier had
seen a Killedeer at Pigeon Spring.

10 June.

It rained all last night. Got up at
0715. It was dry, but cloudy and cold.
After breakfast we set out to hunt.
I went N., toward Palmetto Mt. Ned
went south, around the foothills of
Mt. MacGuder. I got up to 7500 ft.,
at least. During the course of the
morning, which lasted till 2 P.M., I
shot: 1 Dendroica nigrescens, 3 Psaltiriparus
minimus, 2 Thryomanes bewickii, 1 Spizella
passerina, ~~1 Empidonax griseus~~, and
1 Empidonax griseus (Gray flycatcher).
Also saw the following: Pinon Jay,
Mt. Bluebird, House Finch, Scrub Jay,
Mt. Chickadee, Bell Sparrow and
Brewer Sparrow restricted to valley, do not
get up the canyons or ridges. In the
afternoon it was still windy, but
the rain stopped about noon. We
fixed a table of sorts and skinned until

1957

Journal

24

10 June

Indian Spring, N. Slope Mt. MacGruder, 7300 ft., Esmeralda Co., Nev.
about 1800. Ate supper & wrote notes before our evening owl hunt. The area I worked today is a nice canyon opposite Indian Spring. An old road goes way up. The slopes & adjacent ridges, as are all that can be seen, are Pinon with some Juniper, pretty open but some big trees, and sage and other scrub beneath. The sun is now out for a while before setting, and the wind is dying down some. An Ash-throated Flycatcher is singing near-by. Went out hunting at dusk, no luck. Heard Poor-will only. No owl or night hawk as we heard last night.

11 June

Got late start today - up about 0630. Still earlier than yesterday. Ned drove up the road and climbed Mt. MacGruder, returned to camp about 1330. He found Crossbills, and Junco. I stayed local - went up the canyon to the E where we were owl hunting, then back along ~~south~~ ridge S of the "cabin". Out about 3 hours, couldn't get close enough to get a shot at anything worthwhile. Shot a ♀ Bl. thr. Grey Warbler. On the morning hike saw Mt. Bluebird, House Finch, Blue-grey Gnatcatcher, Brewer Sparrow, Grey Flycatcher, Bewick Wren, Spotted Towhee, Bush-tit, Mt. Chickadee, Chipping Sparrow, heard Black Headed Grosbeak, possibly Green-tailed Towhee. Back in camp shot a Bush-tit & a Brewer sparrow I flushed off.

ails
(1957)

Journal

25.

11 June

Indian Spring, N. side Mt. Macomber, 7300 ft. ^{Emeralda Co. Nevada}
nest yesterday and today. Put up these 3 birds,
and 1 from yesterday. Later in afternoon
went across road & got an Ash-throated
flycatcher with a $\frac{1}{2}$ blood. We had been
hearing him since we arrived, off & on.

Put him up, and shot a lizard, Scoloporus
which I put in formalin. Later took
notes of Brewer Sparrow nest, shot a
House Finch near the spring. About
1745 a Mourning Dove came near spring.
Moon is shining all afternoon. I'm sort
of easing.

Today is beautiful. The sun has shone
bright all day, & is hot. I am in tee shirt
now, contrasted to field jacket 24 hrs. ago.
The late pm. sun on the White Mts. in
the west looks funny - the snow on top
looks all glistening, like it was half
melted & refrozen. There is a breeze today,
but light, not windy as before. Very nice
day. The good weather has brought
out the herps. Have seen a lot of
lizards today but no snakes.

About 1900 a Hairy Woodpecker near spring.
About 2000, we left for owl hunting
near Pigeon Springs. *

2 mi. S. Pigeon Springs, 6400 ft., Emerald Co., Nev.

Got here just before dusk, started calling
for Screech Owls. No luck. Poor birds
here are more numerous than at Indian
Springs. Also saw 1 or 2 bats. Good
pinon over all these slopes.

12 June

Indian Spring, N. Side Mt. Mac Shuda, 7300 ft., Esmeralda Co., Nev.

Spent the morning finishing up yesterdays specimens. I chased a Lazuli Bunting around the spring for nearly half an hour, couldn't get a shot. Shot a Green-tailed Towhee. Red Eyed (= Spotted) towhees also in area. Left here about 11:30 A.M.

1/2 mi. S. Pigeon Spring, 6400 ft., Esmeralda Co., Nev.

Hunted here for about 1 hour. I got two Townsend (Plain), 2 Brewer Sparrows, and a Black Throated (Desert) sparrow, Amphispiza bilineata. Nothing else new here.

From here we moved on toward Cottonwood Basin in the White Mountains. at the top of Westguard Pass, we decided to go to Big Pine for gas. Returned and started in the road to the White Mt. Research Station. This is a very poor, in fact impossible road for a sedan. We got about 8 mi. in, past Reed Flat, and Ned's buick couldn't make the steep grade. Backed a long ways, turned around and headed back to Big Pine, on the way to the Queen Mine. Went up Rt. 6 to just over the Nevada line. Found a deserted ranch.

Ranch in valley S. of Mt. Montgomery, Mineral Co., Nev.

A pretty little oasis here with several deserted buildings. This was our H.Q. for nearly a day. Water piped down from Queen Canyon runs a gravel stream past here, and 2 ponds are formed for cattle, which had the run

Banks
1957

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12 June

Ranch in valley S of Mt. Montgomery, Mineral Co., Nev.
of the place. Around the oasis were a lot
of trees, poplars, locust(?), etc. Around here
we saw and heard: Western Kingbird, Yellow
Warbler, Violet-green Swallow, Bullock Oriole,
Killdeer, and Western Meadowlark.

13 June

Spent the morning collecting at Queen Canyon.
(see next entry.) Got back at noon, put up
skins until about 1600, took a bath in a
pond, and left. Last night there was
a full moon, very bright. It was also
very windy all pm. + night, but it
died down in the night. We were
awakened at 0430 by two Western King-
birds having territorial squabbles. See
species account.

Queen Canyon, 7000 ft., Mineral Co., Nevada.

At 0630 we left the ranch, hiked two miles
to the entrance of this canyon. Willows and
wild rose form a dense thicket along
this stream, and a lot of birds were here.
Ned went on up the canyon to Queen Mine.
He was interested in a ^{South} ~~Hooded~~ Oriole record
from here, since 1893 (Death Valley Expedition).
As expected, we found no trace of this species.
I took a side canyon, ~~as~~ climbed to 9000 ft.
It was all piñon
and juniper (sparse), with Mountain
Mahogany coming in above. I ran through
a ~~lot~~ belt, sort of, of Empidonax, probably
ginsens altho I couldn't get one. I shot
a warbling vireo and a Tubine warbler in

chs
1957

Journal

28.

13 June

Queen Canyon, 7000 ft., Mineral Co., Nevada
 The willows, and a Stellar Jay, in Pinon
 not far from the stream. Put up the jay +
 the warbler. On the trip back to the ranch
 shot a Sage Sparrow. Ned got a Solitary
Vireo, blown up badly, not in breeding
 condition + not saved. He also got an Orange
Crowned Warbler, Horned Lark, and B.G.
Gnatcatcher. He stayed mostly in the
 willows along the stream. This is a
 beautiful area, one which was interesting
 to me in. My bird list for the area,
 including the ranch, was as follows:
Western Kingbird, Yellow Warbler, Robin,
Bluebird, Oriole, Violet-green Swallow,
Horned Lark, Spotted Towhee, Brewer
Sparrow, Hermit Thrush (heard), Tolmie
Warbler, Warbling Vireo, Blue-headed (= Cassin
 = Solitary) Vireo, Bush-tit, Western Wood
Pewee, Western Meadowlark, Fox
Sparrow, Stellar Jay, Rock Wren, Gray (?)
Flycatcher, Black-throated Gray Warbler,
Combird, Killdeer, Sage Sparrow, Chipping
Sparrow, + Red Crossbill + Ash-throated Flycatcher.
 Ned saw.
Lazuli Bunting also. I shot a lizard.
 There is a good dirt road all the way from
 Rt. 6 to the Queen Mine, we found out
 later. the mine is active. I came down
 from the mountain in a wrong canyon and
 had to cross about 6 ridges to get back
 to the base of the canyon. Boundary Peak
 is very beautiful from both below in the
 valley + above on the hill. Saw several deer.

13 June

Enroute from Queen Canyon to Sweetwater Mts.

Drove back to Benton, across to Lees Ferry, up to Bridgeport, turned off toward Sweetwater.

Birds seen enroute: Western Gull,BB Magpie, Shrike, Barn Swallow, Cliff sparrow
Swallow, Spotted Sandpiper, Redwing ^{bank.}Brewer Blackbird, Nighthawk, ^{Turkey Vulture.} Turned

off road to Sweetwater, on a dirt road leading to Sweetwater Canyon. This area

is very heavy good Pinon. It was

nearly dark when we set up camp at

a ford. The stream is a rushing torrent,

Just as we parked we spotted what was probably a Magnolia Warbler, both

shot it and missed, or only wounded it. See species account. After dark

wandered hunting owls for a while, no

luck. I shot at a Por-will just as it left its perch + of course missed. Sat

around campfire + wrote notes all night.

14 June

Mouth of Sweetwater Canyon, Lyon Co., Nev.

Started hunting about 0630. I went up

the creek a good ways, following the

Aspen, cottonwood + willows on one side,

pinon on the other side of me. Later I

turned south and worked some pinon

ridges. There was not much bird life

either place. The pinon in this area is

very good, pretty thick, some very big

trees. Not much juniper in it. The

birds I saw were: Green-tailed Towhee,Cassin Finch, Pine siskin, Western Pe Wee,



Sanks
1957

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14 June

Mouth of Sweetwater Canyon, Lyon Co., Nev.

Spotted Towhee, Chipping Sparrow, Violet-green Swallow, Robin with partly completed nest, Mountain Chickadee, Warbling Vireo, Black-throated grey Warbler, Bush-tit, Stellar Jay, Turkey Vulture, Western Tanager, and some sort of Junco.

Black-throated Gray Warblers were not as common here as farther south in pinon. Green-tailed Towhees very common. Lots of Swallows. Shot 3 Cassin finches, 2 Mountain Chickadees, and 1 each Siskin, Spotted Towhee, Bush-tit, and a 1st year Western Tanager (also saw ~~adults~~ adults of this). Red gut Audubon Warbler, a Stellar Jay, a Wren, a Hairy Woodpecker (which I also saw), a Red-breasted sapsucker, a Black-throated grey Warbler (at least). We hunted till about noon, left about 1300.

Enroute to Berkeley - returned over Sonora Pass. Got a list of 24 birds. Found a Beachy Ground Squirrel in the road, + an Ohio Sided flycatcher.

(Here were no Empidonax flycatchers in the Sweetwater Area. I also shot 2 chipmunks. Arrived Berkeley about 2100. Mileage not recorded, but it was just over 1000 miles (1050±).

(I worked to Calif. state line, did not cross, so all my birds seen are from Nevada, except the bush-tit was on the line.

ahs
1957

Journal

31

8-14 June

Composite List of Birds seen on trip.

Cathartes aura

Buteo jamaicensis

Circus hudsonius

Falco sparverius

Charadrius vociferans

Actitis macularia

Larus californicus

Zenaidura macroura

Otus asio

Asio otus (new)

Phalaenoptilus nuttalli

Chordeiles minor

Colaptes cafer

Balanophyia californica

Asyndesmus lewis

~~Sph~~ *Sphyrapicus varius* (daggett)

Dendroopos villosus

Tyrannus ~~vociferans~~ verticalis

Myiarchus cinerascens

Sayornis ~~phoebe~~ saya

Eupidonax wrighti (new)

Eupidonax griseus (new)

Contopus richardsoni

Mniotilta borealis

Eremophila alpestris

Tachycineta thalassina

Hiundo erythrogaster

Petrochelidon albifrons

Cyanocitta stelleri

Aphelocoma coerulescens

Pica pica

Corvus corax



20th
1957

Journal

32.

8-14 June

Composite list of Birds seen on trip. - continued.

Gymnorhinus cyanocephalus (new)

Merula columbiana

Parus gambeli

Parus inornatus

Psittiparus minima

Sitta pygmaea

Thryomanes bewickii

Salpinctes obsoletus

Mimus polyglottos

Turdus migratorius

Hyalophyllos guttata

~~*Spizella*~~ *serripes*

~~*Sitta*~~ *currucoides*

Myadestes townsendi

Pipilo caeruleus

Lanius ludovicianus

Vireo solitarius

Vireo gilvus

Vermivora celata

Dendroica aestiva

Dendroica auduboni

Dendroica nigrescens

Dendroica magnolia (?)

Geothlypis trichas

Sturnella neglecta

Xanthocephalus xanthocephalus

Agelaius phoeniceus

Icterus parisorum (new)

Icterus bullocki &

Euphagus cyanocephalus

Molothrus ater

Piranga ludoviciana

3 birds
(1957)

Journal

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8-14 June

Composite list of Birds seen in the area

Phoenicurus melanocephalus

Passerina amoena

Carpodacus cassinii (new)

Carpodacus mexicanus

Spinus pinus

Loxia curvirostris

Chloroceryle chloroceryle

Pipilo maculatus (= *erythrophthalmus*)

Amphispiza bilineata (new)

Amphispiza belli (nevadensis)

Junco oreganus

Junco cinereus

Spizella passerina

Spizella breweri

Zonotrichia leucophrys (orientalis)

Passerella iliaca

80 species.

Also:

Passer domesticus

Columba livia

22 August

Hopland Field Station, Mendocino Co., Calif.

Dec. hunting with Charles Thayer and some
personnel of the station. Got a few

Thurs. morn., stayed till 2 pm. Put up
several specimens which were collected
earlier in the summer by Charlie & Bill
Longhurst.

see below.

11-12 Sept.

Crocker Camp, 5 mi N. Beckwouth, Ft. Plumas Co. Calif.

Arrived here about noon Fri., and it shortly began to rain. Went deer hunting on Crocker Mt., I got clear to the top, 7400+ ft., lots of deer sign, Ralph Raitt + Vic Lewis saw a doe + fawn, I saw a doe + 2 fawns. Hunted till dark, got caught in rain. Hunted for owls in evening, nothing. Saw a poorwill. Sat. A.M. it was almost clearing. Vic set gopher traps, Ralph + I hunted. Saw a doe. An awful lot of sign of deer everywhere here. About noon shot a White-headed Woodpecker, later a Stellar Jay. Ralph shot a Piñon Jay out of a flock of 25 that flew past camp. It began to rain again about 1 P.M., rained pretty hard till 2:30 (Present time of writing.) Earlier, I shot a Brown Creeper and 2 Mt. Chickadees. See next page for list of birds. Saw a rabbit. Later it began to rain again, and rained pretty constantly all evening and all Sat. night. Sunday morning we broke camp and left about 9 A.M. Drove back the Feather River valley, got home about 3:30 P.M.

Exact locality

Crocker Mount Sta. 5 mi N 2½ mi W Beckwouth,5760 ft., Plumas Co., Calif.

Map: Portola quad., 15 min. ser., 1950, USGS.

This is it.

Zanks
1957

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see below

11-12 Sept.

Crocker Camp, 5 mi N Beckwouth, 5760 ft., Plumas Co., Calif.

Oregon Junco

Stellar Jay

Mt. Chickadee

Stellar Jay

Sand Hill Crane (rare, ant.)

Piñon Jay

Ruby Crowned Kinglet

Clark Nutcracker

Mt. Bluebird

Purple? Finches. — Cassin Finch

Golden Crowned Sparrow

White Crowned Sparrow

Flicker ~~Horre~~ (Red shafted)

Hairy Woodpecker

Red Bearded Nuthatch

Copper Hawk

Sharp Shin Hawk

Red Tailed Hawk

Poorwill

Ruby Crowned Kinglet

Spotted Towhee

Crow

Black Billed Magpie

Brown Creeper

On trip home added:

Meadowlark

Yellow Billed Magpie

Sparrow Hawk

Marsh Hawk

Blackbirds sp.

Crocker Sand Sta, 5 mi N 2 1/2 mi W Beckwouth, 5760 ft., Plumas Co., Calif.

Dec. 21, 1957.

2.8 mi. WNW Richmond, 1275 ft., Jefferson Co., Ohio

Family took a ride out to road leading by West Park of Jefferson State Park. Here about 4 P.M. I shot 2 chickadees and a downy woodpecker. (See species accounts.) They were in a general flock of chickadees, tufted titmice, and white-breasted nuthatches. Also saw one red-bellied woodpecker. All these birds were in the deciduous trees by the parking lot, at edge of open area + woods.

Map: Ohio, Cordis Quad. 1:62500, 1903 Ed., (1914) U.S.G.S.

2.1 mi WNW Steubenville (Post Office), 1180 ± ft., Jefferson Co., Ohio

About 4:30 P.M. set 25 mus. sp. set w/ peanut butter in old grown up field, with grass, weeds, and briars. A few locusts growing up. Set traps at about 5 paces intervals.

Dec. 22, 1957

Checked traps at about 8 A.M. Had 2 Peromyscus leucopus. They were in weedy briars along the edge of field. Nothing in traps in field. Saw a rabbit. Haven't seen any birds in this field or area. Traps empty in P.M.

Dec. 23, 1957

Nothing in traps this A.M. Wandered all thru the woods, partly along ^(Braylinton) Forest Audubon Trail, boy has it changed in the last 15 years. Shot a chickadee. Saw Dendrocopos villosus, D. pubescens, Parus carolinensis, P. bicolor, Certhia familiaris, Thryothorus ludovicianus, Turdus migratorius, Accipiter sp.

Picked up traps in P.M. and moved them to woods. Set them in groups of 5, around fallen trees and good places for mice.

Journal

37,

2.1 mi WNW Stenleville (Post office) 1150±ft. Jefferson Co., Ohio.
Dec. 24, 1957

Had 2 mice in traps. One had left hind foot gone and was chewed (by a shrew) on one shoulder. This one was caught in a hollow tree. Later traps in this tree failed to get either another mouse or the shrew. The skin was fixed up and is 265. The other was near a bunch of logs + stumps, and had part of the tail missing. It is #264. Picked up the traps in A.M.

Dec. 25-27, 1957

Visited Newark, Ohio. took trip to Buckeye Lake but didn't see anything.

Dec. 27, 1957

302 Vilna Ave. Stenleville, Jefferson Co., Ohio.

Had set 15 traps around yard. Caught a short-tailed shrew near the rock pile.

Dec. 28, 1957

Jefferson Lake area, Jefferson Co., Ohio

This is the day of the Forest Audubon Club annual Texas Bird Count. Dad (C. S. Banks), Art Johnson, and I were in this area. We were out from about 0800 to about 1700. We covered approx. 10 miles. A warm day, but dark and cloudy. Other areas were covered by Tenny, Bailey, Murser, + E. Famer. Our species seen were: Minimus polyglottos (in yard at home), Cyanocitta cristata, Sturnus vulgaris, Passer domesticus, Melospiza melodia, Junco hyemalis, Corvus brachyrhynchos, Colinus virginianus, Turdus migratorius, Richmondia cardinalis, Parus carolinensis, Ondropus pubescens, Spizella arborea, Parus bicolor, Eremophila alpestris.

Dec. 28, 1957

Jefferson Lake area, Jefferson Co., Ohio
Colaptes auratus, Thryothorus ludovicianus,
Ondrocopus villosus, Sitta carolinensis, Centurus
carolinus, Regulus satrapa, Parus atricapillus,
Sialia sialis, Bonasa umbellus, Buteo
jamaicensis, and Megascops alazon.

A total of 26 species, 485 individual birds. Also
seen in the count area, by other groups:

Accipiter cooperii, Buteo lagopus, Falco sparverius,
Phasianus colchicus, Oryzopsis pileatus, Asio
otus, Otus asio, Melanerpes erythrocephalus,
Sphyrapicus varius, Certhia familiaris.

Troglodytes troglodytes, Sturnella magna,
Agelaius phoeniceus, Spinus tristis, and
Spizella pusilla. Total 41 species.

Also in this area had found a dead coon
Procyon lotor and 2 possums Didelphis.
Got skull and baculum from coon, # 267,
and one possum skull # 268.

Dec. 30, 1957

2.1 mi. WNW Steubenville, (Post Office) 1150 ft., Jefferson Co., Ohio.

Set traps in woods again, in apparently good
places. Got one Peromyscus in same area as
264. This one is # 269.

Dec. 31, 1957.

Picked up traps today. Had one Peromyscus,
caught in a tree (hollow). # 270.

R.C. Banks
Species Accounts
1956-1957
Reptiles

Banks
1956

Contra tenuis

28 Apr. Hopland Exp. Station, Mendocino Co., Calif. -

Don Roberts got one under a stone in a pasture by a creek, I got one under another rock nearby. Later Paul Anderson got another in same field.

3 mls
1957

Hopfer Snake

7 June 1957

W. of Oahdale (10 mi ±) on Rt 120.

Found alive in road. Examined it while driving along. First 6 scale rows on side are smooth, rest keeled. Undivided anal scale. Back has row of large brown blotches, lined with black. Lining gets bigger (wider) toward rear. Sides also have brown blotches, getting darker to black toward rear. Belly sort of yellowish.

mk, R.C.
1956

+ *hammophis elegans terrestris*

11 Mar. 3 Mi N. Half Moon Bay, San Mateo Co., Calif.

Caught snake in old field, probably atrichhe, with lots of mustard. Identified by Jim Anderson. In cage in L.S.B. on 12 Mar. Defecated soon after being put in cage.

15 May Fed the snake a *Reithrodontomys negalotis*. Snake grabbed him almost immediately, got him right in the middle of the abdomen. The mouse chewed on the snake's head, pretty far back, and blood appeared but we couldn't tell whose blood. The snake then a coil around the mouse, and choked him. The mouse tried to chew on the snake's back, but couldn't do much. The mouse was almost dead but each time the snake took a new bite or new grip the mouse squeaked. Gradually the snake worked down to the hind quarters and began swallowing it hind end first. It didn't take long to get it down. The snake really stretched and its neck was quite swollen. Within 15 minutes the mouse was completely gone. Immediately after it disappeared it moved rapidly down past the lung, about 6-8 inches. Here it made a bump about 1" in diameter and about 3 1/2 - 4" long. While it was going down the snake opened its mouth several times, possibly as a breathing aid.

19 May Put a lab mouse in the cage yesterday afternoon. Today between noon and 5 PM the snake ate it.

and
1956

Thamnophis elegans terrestris

2

Cage in MVZ snake caught 11 Mar 56

20 July - This week his eyes are cloudy.

23 July - Skin of head hanging loosely. Skin broken along line of mouth, and across pre-frontals.

24 July - Skin off lower part of head. P.M. Skin pretty well peeled back from sides and bottom of head.

27 July - Saw several dark round objects (13) scattered over body. Thought they were eggs of a parasitic insect. Later picked 50+ from the snake and the cage. Also are some very small, light colored beasts. The large (1mm) dark things seem to be Arachnids of some sort, gorged with blood. Returned snake to cage + put water in the pan, dry for a long time. He immediately drank, rested, drank, repeated several times. His lower jaw was under water, and he opened and closed it fairly rapidly. Movements in the back of the throat (or head, between rami) indicated swallowing. Later it lay in the water as much as it could. After a while it twisted wildly through the shavings on the cage floor, and got covered, the shavings sticking to its wet body. Soon the skin on the back of its head was off, and it was split and loosening along the side.

29 July Today his skin is completely shed. Added a ♀ *Peromyscus maniculatus* to cage. Snake struck immediately, several times, but mouse got away. After missing, it retreated under cardboard on floor of cage.



Banks
1956

Thamnophis elegans terrestris.

Caged in MV2

29 July, then soon struck from there. Still the mouse got away. Added another mouse later, snake struck immediately, but the mouse got away and the snake got his mouth full of shavings.

30 July - Added a Sceloporus occidentalis.
Mice still uneaten.

31 July - Mice escaped. Snap trapped them both overnight in office.

6 August - Sceloporus is gone, but snake doesn't look any better. He has been getting thinner and thinner.

R.C. Banks
Species Accounts
1956 - 1957
Birds
Miscellaneous Species

Banks, R.C.
1952

Great Blue Heron

1 April Bear Creek Road, 2nd Bridge E. of San Pablo Rd.
Contra Costa Co., Calif - at least 5 nests
in a Eucalyptus tree. Nests are 50+ feet
above the ground. Several birds on nests
seem to be incubating. One came in, may
have fed (?) another. Quite a bit of clucking
and cackling.

Banks, R.C.

Banks
1956

Anas strepera

Gray Lodge Waterfowl Refuge, Butte Co., Calif

2 Dec. 1956 Picked up a dead bird in good shape and brought it back for a skeleton.

Plucked it out on 8 Dec. It was a ♂, fairly fat. It had been shot - found one shot in a wing. The stomach was empty except for very fine stone, quartz-like in appearance. #146.



Barry R.C.
1956

Surf Scoter

11 Mar. Montara Beach, San Mateo Co., Calif. - Saw one bird while eating lunch.

12 Mar. Beach N of Half Moon Bay - Dead bird on beach. J. Schnell collected head. I took stomach for analysis. Bird pretty far gone. Unable to sex it.

ahs
1956

Elanus leucurus

2 mi SE San Jose, on Rt. 17, Santa Clara Co. Calif

27 Oct. Saw two birds. They were perched in walnut trees near a plum orchard. They are very falcon shaped, long pointed wings with black below on wings. The flight pattern is very distinctive. When perched they appear almost entirely white, with a black line on head and some black on wings. They often hover in one spot much like a Falco sparverius, however, the very whiteness will distinguish them.

Banks
1957

Buteo jamaicensis

Feb. 1, 1957

Berkeley, Alameda Co., Calif.

Ron Medina answered a call to MVZ + picked up this adult red-tail which was found dead at 2411 Hillside Ave., SE of the stadium by Mr. Hall. The bird had been seen the day before flying. It had evidently starved to death as it was very emaciated. I was unable to weigh it. The right hind toe (F) had a large growth on it which apparently kept it from using that foot - the cause of starvation? There were some pellets in the throat, but they were not saved. The bird was a ♀, not in breeding condition. Skin 174, turned out very well.

Barker
1957

Falco sparverius

Piedmont, S. of E. Entrance to Campus, Berkeley, Alameda Co., Calif.

A pair of sparrow hawks here, in area between campus entrance + first bldg. S, W. side of Piedmont. Both were active in one Eucalyptus tree. Both were calling, ~~while~~ while flying and perched. One flew ~~24~~ to another Eucalyptus tree, the other flew E. to a pole in stadium theater area. The one Eucalyptus tree is broken off at top, with some sort of cavity in the snag. ~~They~~ Both were at this general part of the tree. I had heard one of these birds while I was in Cornell Hospital Feb. 24 - Mar. 2.

Lophortyx californica

1957

Gronanni ^{Hall} Bluff, U.C. Campus, Berkeley, Alameda Co., Calif.
Heard a bird calling the whistled — —
about 5:10 P.M. Saw 1 ♂ bird in a tree (pine)
on a limb about 10-12 ft off ground. In very
heavy growth. [March]

sub 2
1957

Grus canadensis

11 Oct., 1957

Crocker Camp, N. Berkmanth, St. Placido, Calif.

this afternoon saw 2 flocks of cranes.
flying south, first flock about 40 birds,
second flock a couple hours later about 60
birds, both flocks in V formation.

Banks
1956

Erolia minutilla

Dec. 2, 1956

Grey Lodge Waterfowl Refuge, Butte Co., Calif.

Found dead by Alden H. Miller. I brought it home, froze it, prepared skin 7 Dec.

♀. Skin very loose, easy to skin. Had hard time getting wings in place, finally asked Don Medina for help. Skull was 2 layer only in a small area in the back. Didn't wrap the bird.

subs. R.C.
956

Zenaidura macroura
Mourning Dove

1.

3 Apr. 1956 Between Cafeteria + Ver. Art. - Nest in Cedrus tree. On horizontal branch about 9 feet high. May not be completed yet. One on ground with something in mouth flew to nest, other flew away. Just a very rough platform of small twigs.

4 Apr. Fulton St. along ath. Field - See Journal, Pg. 20, 2 Apr. 1956 Found 1 egg, 1 part of egg under Cedrus tree. Whole egg had a large hole near one end, small hole near other end. Eggs are pure white, whole one measures 27.0×20.3 mm.

18 Apr. Between Cafeteria + Ver. Art. - Have peeked at this nest often in the past 2 weeks. There has always been a bird sitting on the nest. Construction of a building near the area and all the noise associated, including putting posts near and in edge of trees, has not made them desert. I am confident they were incubating on 6 April.

20 Apr. This nest is a mere platform of twigs, appears about 4" in diameter. About 9 ft up on a horizontal limb ^{2" diam.} it is about 4" past a major fork, and rests on a large and a small ($\frac{1}{2}$ " diam) branch. Bird incubating usually sits E-W, only once seen headed NE-SW.

W side Fac Tennis Court - Bird with about 8" twig in mouth walked to where live oak overhangs fence of court. Returned w/o twig and sat there. Could see no sign of nest.

amb
1956

Zenaidura macroura

2.

30 Apr. Between Capetia and Lee Art - Bird this morning is sitting on edge of nest. This may indicate that young have hatched.

1 May Nest dirty with droppings on edge. Am positive from this that young have hatched.

16/6 May West Gate field Nend - Saw 2 eggs on ground, looked like Dove. One of them is fairly old and was picked clean by ants. Ants were just working on the other which was fresh but had 2 holes in it. Directly above, about 12 ft. high is a typical Mourning Dove nest.

1957

13 Feb.

Berkeley, Alameda Co., Calif

At 5 P.M. along Dana St. saw several Doves. For the most part they seemed to be in pairs, no singles or larger groups. Saw no courtship behavior but there seemed to be a definite togetherness. Doves have been calling around here in the mornings for several mornings.

23 March, 57.

2214 Haste St., Berkeley, Calif. Alameda Co.

At about 10 A.M. saw a pair of doves in and around the magnolia tree in the front of the house. They are building a nest in a fork of a heavy, nearly horizontal branch about 18 ft. up. One bird, which I presume to be the ♀, was sitting at the fork. The other bird would fly to the ground in the front yard next door, where there is no lawn but flowers, etc.

Banks
1957

~~Zenaidura~~
Zenaidura macroura
23 March 57,

31

2214 Haste St., Berkeley, Alameda Co., Calif

Here it gathered nesting material. Flying back to the bird in the tree, it walked along the branch, and across the back of the bird seated there, actually walking on the bird! Twice I saw it do this. It evidently gave the material to the bird in the tree, and this bird arranged it.

24 March

Saw one bird flying into the tree with a twig about 8" long crosswise in its bill, at about 7:45 A.M. It landed in tree, stood on the back of the bird sitting at the fork, and gave the latter bird the stick. Then moved to one side as the second bird arranged the stick. The bird at the nest is seated in a different position today. The first bird stayed nearby for a couple minutes, then flew to NE corner of Haste + Haste, presumably for another twig.

25 March

Still building. Parts of the nest show sticking out over limb. 8:30 A.M. One bird sitting, other flew into tree.

19 April

From a few days after the last entry, I have not seen any birds around this area. As far as I can tell, the nest was never used - perhaps was never completed.

3 birds
1957

Bubo virginiana

25 April 1957

(Near) Moraga, Contra Costa Co., Calif.

On 26 April Ray Richman brought into MVZ a horned owl found the previous day near Moraga by Steve Herman. It was a DOR, in good shape. I put up the skin on 27 April. Took 3 hrs. for entire job. It is ± 184 . It was σ , testes 9 mm. WT, 978 gm. No fat. Stomach empty except for a few small pieces of gravel. Saved the eyes in alcohol. Richman took the ectoparasites from this bird.

ank, P.C.
1956

Manisium gnoma
Pygmy Owl

7 Apr ¹⁹⁵⁶ 3 mi S. Stinson Beach, Marin Co., Calif.

Pickups on road a bird, badly smashed,
fairly fresh. Carrying *Sceloporus occidentalis*
in claws. Probably a ♂ (FAP). Collected
wings.



25
1957

Aeronautes saxatalis

1.

25 April

U.C. Campus, Berkeley, Alameda Co., Calif.

A flock of 5 White Throated Swifts flying + feeding around Campanile on campus. Up high, about level of clock face. All birds fly out from tower, pretty much together, then all fly in toward tower, calling, swooping by the S + E sides, where it is sunny (0640). Occasionally land on at least catch hold of side of building. One or two landed momentarily on clock numbers. Their calling is a series of chips, rather harsh, fairly high pitched, and varying in speed. Occasionally cliff swallows mix in, but don't fly into tower area. A few minutes later, now there are more swifts, at least 6, maybe 7-8. Two birds flew to same place at tower, hung together in free fall for several feet. Often the birds fly in the group to one small area of the tower, seem to flutter together, then all leave. Occasionally one or two would fly to the W side of the tower, which was in the shade, but most of the activity was around the clock face of the S side, and the SE corner area. Also, there are 2 birds mixing with the cliff swallows around LSB, SE entrance. The one bird came in and "buzzed" the whole line of swallow nests, with loud chips.

26 April

A group of 4 going thru the same sort of activities at 0630 this morning.

Banks, R.C.
1956

Anna's Hummingbird.
~~st~~ Calypte anna

1.

- 10 Feb. N.W. corner Library Saw 2 hummers flying about in top of pine tree, quite high. Could not get in good observing position.
- 13 Feb. S. Side Durant Hall ♂ sitting in top of small tree. Sat for several minutes, occasionally flying out and returning fly-catcher style. Black throat & chin, greenish back, 3". Song like Anna's Hummingbird ♂ heard several days ago. High, raspy squeak, considering size of bird. Flew about 50 feet away, returned very quickly and noisily. Flew into shrubbery S.W. corner Wheeler Hall, for about 1/2 min, returned to perch. About 10 minutes later it flew to height of 50 ± ft., zoomed down so fast I could not follow. It repeated this for a total of 4 times. Each time there was a loud sound as it reached the bottom of its fall (I guess). The last time it fed on red flowers of Cydonia japonica for about a minute, then disappeared at the W. end of Wheeler Hall. Shortly it reappeared in original perch, flew to live oak by steps by Durant Hall. Returned to original perch.
- 17 Feb. Hummer sitting in same perch as before. Heard it chipping also at S.W. corner Wheeler Hall.
- 27 Feb. Hummer sitting same perch as before. Flew off toward power station
- 2 Mar. Hummer squeaking at same perch.
- 4 Mar. Hummer same place.
- 1 Corner Barron Lane + Eschleman Rd. - Pair of Hummers flew by squeaking, from E. to W.

Banks, R.C.
1956

Anna's Hummingbird
Calypte anna

2.

9 March SE. Corner Dec. Art Annex - Bird
squeaking from perch in tree (Live Oak?)

Banks
1956

Symphoricarpos varius

22 Nov 1956

1.8 mi S., 1 mi E. Orinda, Contra Costa Co., 800± ft., Calif.

Shot the bird, only one ♀ saw, out of an
live oak at the edge of a woods, near
a stream. Shot destroyed sex.

Banks
1956

Balanosphyra formicivora
Acorn Woodpecker

Dec. 1, 1956

Approx 5 mi. S. Woodland, Co., Calif

D.O.R. in good shape. Gutted it in the evening, froze it next evening put it up 7 Dec. Very tight skin! Cut the neck, altho I guess this isn't necessary. ♀, molting, some feathers fell out very small + in sheath. Skull was only partially 2 layer, about half way. Very poor skin!

1957

6 May 1957

MUZ

Noticed in the collection an allinistic acorn woodpecker collected by Loye Miller in San Diego Co. All normally black areas are ~~the~~ dark brown. Looks like an extremely faded or bleached bird.

Dendroopos pubescens.

whs
957

2.8 mi. WNW Richmond, 1275 ± ft., Jefferson Co., Ohio.
Shot one of a pair out of a leafless deciduous tree. Also Centurus carolinensis in area. The one I got was imm (unossified skull) ♂, tes. 2 mm. Several holes in dead trees around. Both legs on this bird were broken by shot. But the most impressive thing was the shortness of all bones of the leg. Femur was very short, tibia tarsus also. Skin not as tight as on many woodpeckers.

Banks
1957

Dendrocopos scalaris

26 Jan 1957

Tres Palmas, Vallente Valley, 9000± ft., San Diego Co., Calif.

Walt Muhlback shot a ♀ out of a Yucca -
first seen in a Ocotilla. I put it up as #165.

It had only a 1 layered skull, although the
ovary was quite distinguishable. This was
the only woodpecker seen this day.

Banks
1956

Sayornis nigricans

①

28 April, 1956 Hopland Exp. Sta., Mendocino Co., Calif.

Nest of mud with some grass on building side under overhang of roof, about $2\frac{1}{2}$ inches below roof. Nest D-shaped, about 4 inches in diameter. 4 eggs, white with a few speckles of black scattered over them.

Another nest in similar location and of similar construction on old barn near HQ. contained young.

U. C. Campus, Berkeley, Alameda Co., Calif.

3 Nov. A bird was seen on the N. side of L5B, outside MVZ, near the ledge and word "Anatomy". (One seen here about 1 P.M. one day a couple weeks ago). This one was heard, then seen catching insects from this ledge. It next flew to a horse chestnut tree near the corner of MVZ. Here it replaced a Hylocichla ustulata, and may actually have chased it. The thrush also was "fly-catching". The phoebe remained in area for at least half an hour. (See Hylocichla ustulata, sp. acc.) It remained a very short time in the tree, about 10 ft. off ground, then returned to the ledge and the top of a poplar tree by steps. Later: 1:10 P.M. Phoebe still here, now back in horse chestnut, working toward NW corner MVZ. It is chirping constantly, a loud, single note, down-slurred a little, with an upward jerk of the tail accompanying each note.

Observed in same area again at 3:00 and 3:45 P.M.

Sayornis nigricans

②

U.C. Campus, Berkeley, Alameda Co., Calif.

- 3~~1~~ October - Noticed a black phoebe outside the museum, N side, at NW corner of LSTB, in the same area as one was seen much of last winter. This recalls that the chipping sounds of this bird have been heard for a week or so, but it never registered. It showed up today in the afternoon.
- 4 October - A few minutes before 4 PM, the bird appeared again. It was not here from 2:30-4 PM, It may have been here earlier - I was not in my room.
- 7~~8~~ October - Bird present and feeding at 0910 hrs.
- 9 October - Bird present at 1530 hrs., in rain.

Sayornis saya

20 Feb. 1958

Corral Hollow, Castle Rock, St. San Joaquin Co., Calif.

A bird shot along creek at base of this rock was an ad. ♂ with enlarged testes. Others were seen and heard in Corral Hollow, both near here and farther up in Alameda Co.

anhe
1957

Tyrannus verticalis

1,

19 April 1957

2½ mi W. Patterson, Stanislaus Co., Calif.

Vir Lewin + his wife obtained this bird this date and froze it immediately. On 1 May 1957 he gave it to me. I thawed it enough to slice it open, and put it into formalin for later dissection for Zoo 106 project. Wt. 42.2 gm.

Dissected the bird 9 May 1957.

Cut from chin to vent, removed lung material and heart. Cut + reflected trachea.

Tore away conn. tissue. The state of preservation seems not to be as good as in the other two birds.

General: A small tract with a bit of fat ventrally + posteriorly. Esophagus appears large, as does left liver lobe.

Esophagus: Opens from oropharynx.

Had a dark, ridged appearance at first. This was caused by a large (33mm) caterpillar in the esoph. and possibly extending into the stomach.

Preserved while stretched, the esoph. may not be as it looks. It appears thin walled and smooth inside, except for a few folds on the dorsal side, anteriorly. As it goes dorsal to the heart, it turns slightly to the left.

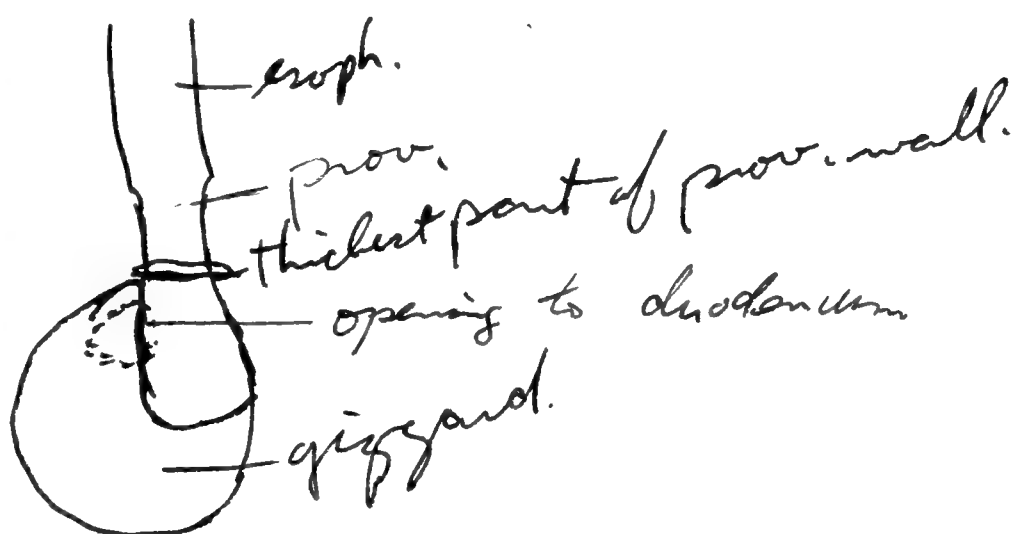
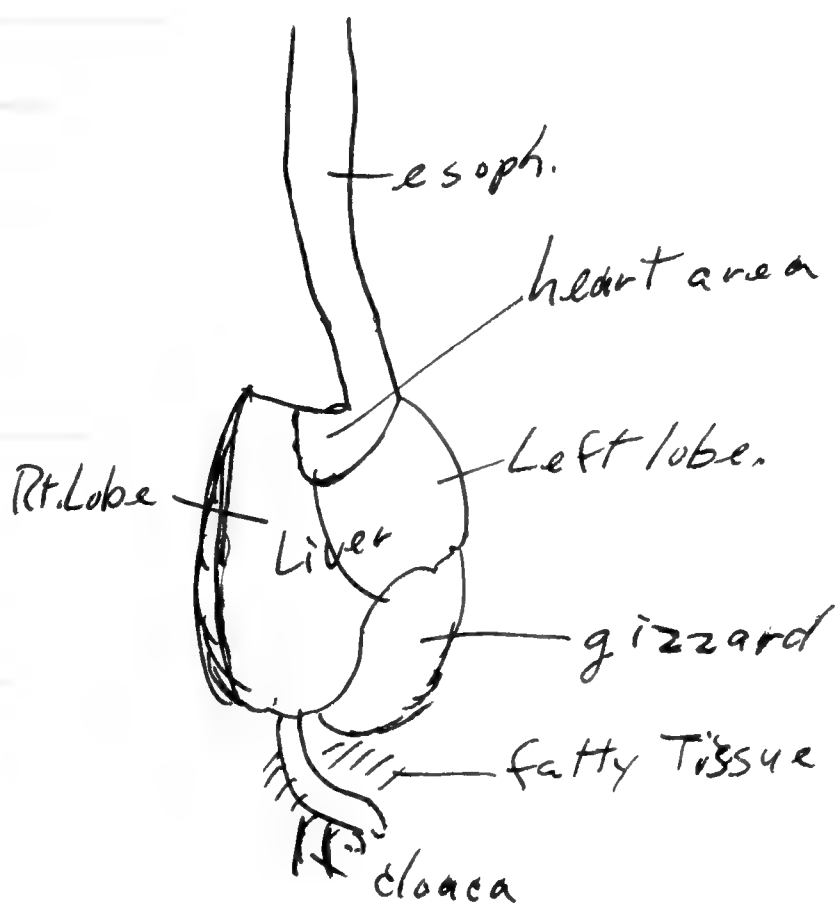
Liver: Left lobe is much smaller than right. It is roughly triangular in shape, lying ~~in~~ the ventro-lateral part of the coelom. Ventrally it bends around and extends slightly over mid-line. It is overlapped here by the right lobe. The right

fs
(1957)

Tyrannus verticalis

2.

19 April, 1957



ms
1957

Tyrannus verticalis

3

19 Apr.

2 1/2 mi W. Patterson, Stanislaus Co., Calif.

lobe extends farther posteriorly, and further laterally. It is rather rectangular shaped. It overlaps the left lobe and extends several mm. to left of center, below (i.e., posteriorly) to left liver lobe. When looking under the area of overlap, I find that the left lobe curls around to the right, well past mid-ventral.

Proventriculus: Esophagus narrows somewhat and continues as proventriculus. This continues on left side of ~~gig~~ coelom, tightly bound to rest of stomach on its (lower) medial surface. The lower part of the esoph. is lined with a rose muscle, which extends and expands in the prov., where the muscle layer is nearly 2 mm. thick. Farther, the prov. is thinner walled, at end of prov. Inner surface of prov. is folded, but esoph. is smooth to the constriction.

Gizzard: This surprises me by being so large. It is almost round, but bulges out ventrally. It was filled with parts of at least one, probably 2, other caterpillars. The thickest part of the wall is the dorsal-posterior corner, which measured 4 mm. Most of the rest of the wall is less than 1 mm. thick. The pylorus is anterior and on the right, pretty far dorsal, near esophageal opening. Gizzard is lined with cornified material, cont convoluted, which extends into lower part of prov.

amb
1957

Tyrannus verticalis

4

19 Apr.

2 1/2 mi W. Patterson, Stanislaus Co., Calif.

Crudendum: Leaves gizzard and swings to right as it goes posterior, then swings left to mid-line on ventral surface of body. Makes a posterior-dorsal curve, and goes right, ascending medially (i.e., halfway from ventral to dorsal) and runs along dorsal margin of right lobe of liver. At same level as top of gizzard, bends dorsal. Tied thread here.

Small Intestine: Continues dorsally to body wall.

Pancreas: In 2 parts, very much like Redwing.

Small Intestine: ~~Narrows abruptly~~ before reaching dorsal body wall. Appears to narrow, but really is just folded, or smushed - possibly end of some food. At the same time it goes dorsal it goes medial, then at mid-dorsal line turns posterior to near end of body cavity. Turns ventral a short ways, then anterior, then in a sharp turn to right posterior beside itself. In another sharp loop it turns dorsal behind (from my view) itself + goes anteriorly to a place dorsal of beginning of st. then swings ventral, follows loop of crudendum around loop and ascends between " and gizzard. Passes dorsal to first part of crudendum, and extends dorsally to body wall. Makes a sharp angle here, and in a wide sweeping loop to

Wals
1957

Tyrannus verticalis

5

19 April

2 1/2 mi N. Patterson, Stanislaus Co., Calif.

left along dorsal body wall joins large intestine. Thread at bend.

Large Intestine; Caeca, which mark the beginning of the large gut, come off where the final loop is farthest toward left body wall. LI continues looping toward center line, where it joins cloaca.

Caeca: Extend on ventral lateral surface of small int., forward (anteriorly) bound by conn. tissue to it. Left caecum 3 mm. Right caecum 3 mm. Wider than in other birds, and more pouch-like than tubular.

~~Measurements~~

Ducts: A duct from right lobe of liver extends between folds of duodenum, + enters duodenum on ascending loop, a little above half way, at level of ant. end of ventral pancreas. A duct from ventral pancreas extends from its posterior end and enters duodenum just before (proximal to, posterior) the bile duct. Ducts will be destroyed when gut is removed.

Measurements:

Dissected around cloaca, tore away all mesenteries, + extended, without stretching, the entire gut, for measurement.

Duodenum: - 38 mm.

Small Int. - 102 mm.

Large Int. - 16 mm.

Duct + SI
= 140 mm.

data
1957

Tyrannus verticalis

6.

19 Apr. 1957

2 1/2 mi. W. Patterson, Stanislaus Co., Calif.

String to string - 85 mm.

Last string to cloaca - 34

Last string to caeca - 17

Total - ~~146 mm~~, 157 mm.

Linings: Duodenum very densely lined with chevron-shaped zig-zag folds(?). Upper S.I. + lower S.I. similarly lined, not as heavily lower. L.I. lined same way clear into cloaca.

Measure: Bird is ♂, left testis very large.

Wt. 140 gm

Calculations from above measurements:

$$SI / \text{wt.} = 140 \text{ gm} / 42.2 \text{ gm} = 3.32 \quad 3.32$$

$$SI / LI = 140 / 16 = 8.75 \quad 8.75$$

$$SI / \text{Duo.} = 140 / 38 = 3.68 \quad 3.68$$

$$\text{Duo.} / \text{wt.} = 38 / 42.2 = .90 \quad .90$$

$$\text{Tot I.} / \text{wt.} = 157 / 42.2 = 3.72 \quad 3.72$$

$$\text{Duo.} / \text{caec.} = 38 / 3 = 12.67 \quad 12.67$$

$$\text{Wt.} / \text{caec.} = 42.2 / 3 = 14.07 \quad 14.07$$

$$SI - \text{Duo.} / \text{Duo.} = 102 / 38 = 2.68 \quad 2.68$$

13 June, 1957

Valley S. of Mt. Montgomery, Mineral Co., Nevada

Was awakened at 0430 by 2 kingbirds having territorial squabbles. They made a lot of noise. Normally it would be dark at this time, but the full, or nearly full, moon made it almost as light as daytime. The chasing continued off and on all day, at least while I was observing.

in
1957

Contopus richardsoni

8 June

9 mi E Jct. 395+120, N. of Mono Craters, Mono Co., Calif.

In a rather bare dry area supporting an open growth of Jeffrey Pine, saw this bird flycatching. Used perches in several trees in a limited area. Sang, or at least called, occasionally. Could hear its bill snapping as it flew. Shot it with 38 aux. First shot in new gun w/ new aux. Saw no others in area, but there was a pair of chickadees (sp.?) in the same tree.

2000

2000

1

2000

2000

2000

2000

Sancho, P.C.
1956

Cliff Swallow

21 Mar. SW. entrance LSB - two or 3 birds flying in and out of old nests in niches above door. Making sounds as they approached nests, and while they were in them. Cannot describe the notes. Entered at least 3 different nests.

1957. 20 March - First birds of year noted today.

1958. 22 March - First birds of year arrived at LSB, Berkeley today.

Banks, R.C.
1956.

Stellar's Jay
Cyanocitta

1.

10 Feb. SW corner USB - saw bird.

14 Mar. Rear (E) of Men's Faculty Club. Two birds here and farther East. One flew into Sequoia, flew away with long piece of string.

19 Mar. NW ~~corner~~ Women's Fac. Club, along creek.

Both members of a pair, one gathering pine nesting material (grasses?) along creek bank. Flew to Conifer N. of Fac. Club, maybe beyond. When I got in position to watch they stopped, took another load as soon as I moved. I then saw one in Sequoia, one in Laurel. Several more loads. One from by Men's Fac. Club, with material went into Sequoia, came back empty. 'It was maybe 30 ft up in the tree.

21 Mar. N. Cornell Hosp. - Bird flew into clump of bushes, sat on ground pecking at area of soft, bright red clay. It appeared to be eating. Thought at first he was dragging gulls, but could find nothing but the clay. Flew off toward nest area. Did not seem to be holding anything.

7 May Faculty Garden - One bird on lawn digging up & eating earthworms. Actions very similar to Robin, including hopping and turning head.

B. H. S.
1956

Cyanocitta stelleri

2.

5 June, Glacier Point, Yosemite Park 7214 ft. Mariposa Co., Calif.

Picked up dead ♀ in afternoon, fairly fresh.
Put up skin 90 at 1930 hrs. Many small
ova, some up to 1-1.5 mm. Broad patch
well (completely) developed. Little fat.
Stomach contained much corn, one
whole sunflower seed, other objects
and pieces of egg shell. An extremely
soft and indented spot on skull
indicates something hit it. Whole skull
was soft.

In the afternoon we baited one with
bread crumbs and took 9 pictures (Oad 4,
ne 5). Jays are extremely abundant here,
probably 20 or more in the area of the
point parking lot & hotel. (Topics came out)

957

23 April 1957

U.C. Campus, Berkeley, Alameda Co., Calif.

A pair of birds in a Sequoia behind Union
was seen chasing a Fox squirrel. They
squeaked loudly, flew at the squirrel,
apparently actually hitting its back.
It ran down the tree, back up part
way, then went into another tree. It
was chased all the way.

26 May 1957

Berkeley Hills, Alameda (?) Co., Calif.

Ralph Raitt got 2 birds in quail traps.

Dr. P. Telbra got feather weight data
from them. I decided I may as well
get gut lengths. next pg.

This refers to Aphelocoma.

Cyanocitta stelleri

13 June 1957

Green Canyon, 7000 ft., Esmeralda Co., Nev.

Heard a jay + saw him in a piñon a good ways off. Screeched like a scb-screech and a couple times and he came right to me, landed in a piñon next to me. I shot it. It was a ♂, testes 5 mm., adult by the wing feathering. ♀ 226. This was the only jay Ned Johnson or I saw.

Banks, R.C.
1956

^{Scrub}
California Jay
Aphelocoma coerulescens

1.

20 Mar. Between LSB + Calif. Hall - Saw Cal Jay carrying nesting material N in this area. Flew into Magnolia, then on into Cedrus tree, deposited material about 20 ft. up. Tree in line w/ flag pole + Magnolia - sort of a double tree.

14 Apr. Hastings Reservation, Monterey Co., Calif.
Flushed ♀ from nest on porch of "school" at ~~2:00~~ ^{2:10} ± hrs.

15 Apr. This nest is about 3 ft high, cup shaped. Built of fairly heavy twigs, lined with fine material. Contained 4 eggs.

16 Apr. Found another nest on other side of bldg. Similar construction. I found it and that it to be empty. I showed Dr. Miller about 20 min. later and it had one egg with a freshly pecked hole in it.

19 Apr. U.C. Campus - Bear Man's Fac. Club - A bird twice visited the garbage cans here, gathering food from boxes containing papers and bits of vegetables.

1957

8 March, 1957

11:45 A.M.

Outside MVZ, Berkeley, Alameda Co., Calif.

A bird with nesting material (dead grass?) in its mouth in Horse Chestnut tree for several minutes. Very noticeable was its "bouncing" or "bowing". It would quickly lower and raise the anterior part of the body, especially the head. It seemed to bend the leg at the ankle joint to do this. It flew to poplar tree, bowed some more, then flew away. Later was pounding at a branch and trying to gather a long string or wire from the horse chestnut. Possibly actively nesting.

anh1
1957

Aphelocoma coerulescens

2.

18 April 1957.

1.8 mi. S., 1 mi E Orinda, 750 ± ft, Contra Costa Co., Cal.

Shot a jay in a little thicket of live oak on the side of a hill. Put it in Formalin, to use for dissection for Zoo 106 (Comp. Anat.) project. Wt. 94.7 gm.

Dissected this bird 27 April. Washed it in water to remove formalin. ~~Then~~

Cut skin from neck to vent on ventral surface. Cut thru sternum and breast muscles, thru peritoneum so to have clear view of entire digestive tract. Removed left lung and heart, broke trachea at fork into bronchi. Removed connective tissue around esophagus.

First impression: Liver is small.

Stomach (i.e. gizzard) is large, looks full and/or muscular. Removed several nematodes from neck region, outside of any tubes.

Esophagus: Narrow, from 8 mm. at pharynx to 3 mm. for most of its length. Curves left upon entering abdominal cavity. Inside: a series of longitudinal folds of quistle-like material. Four folds dorsally, four or five over rest of surface. No crop is present.

Liver: Two very unequal lobes. Left lobe is small, triangular shaped. It lies mainly on left side of stomach, but extends a little past mid ventral line to right. It is connected to stomach (proventriculus & gizzard) by a mesentery. This lobe hides proventriculus from ventral view.

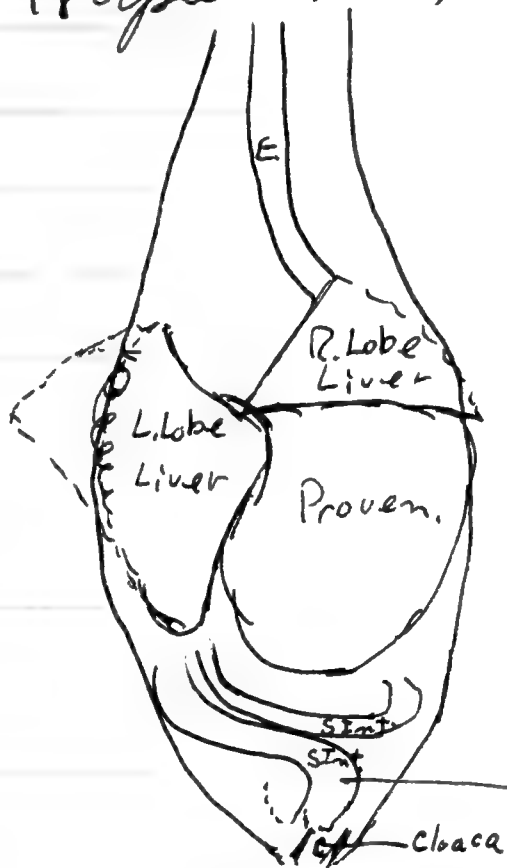
~~Left~~ ^{Right} lobe is much larger. Extends

3 miles
1957

Aphelocoma coenulescens

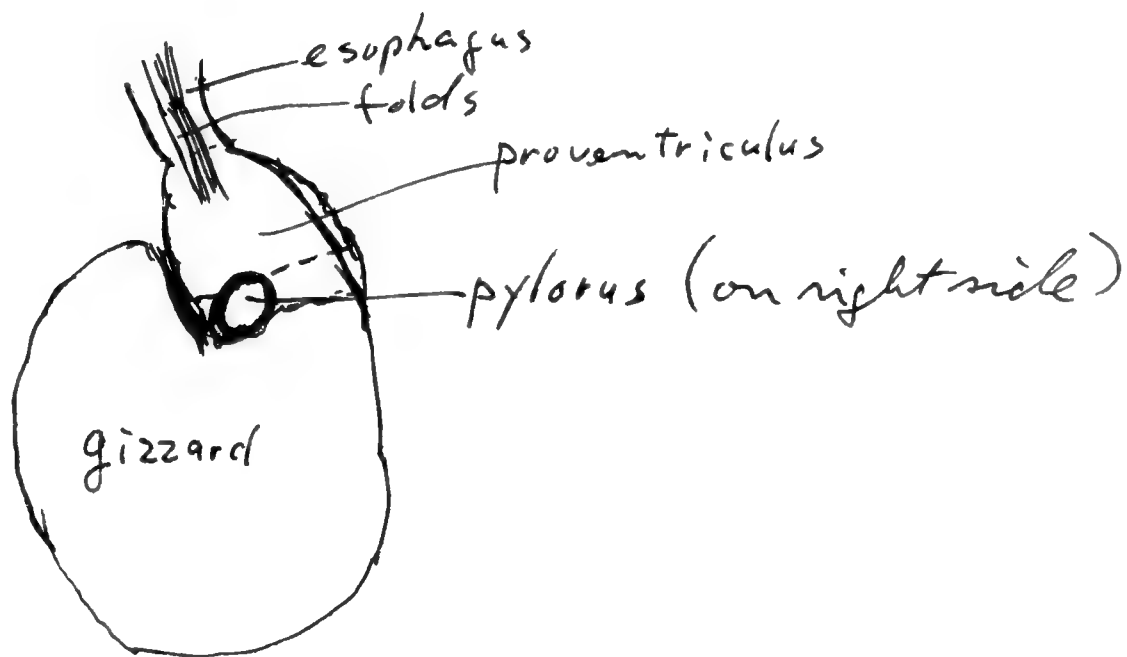
3

18 April 1957

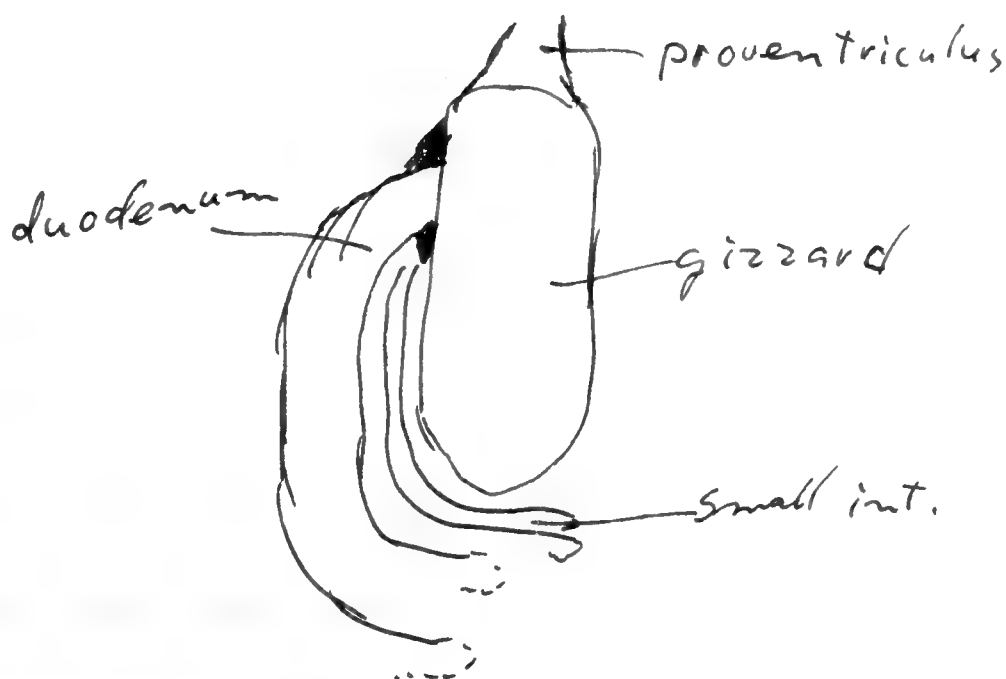


dotted lines indicate
hidden margins
Between proventriculus
and folds of intestine
are fat layers.

First impression.



Left side view, stomach



Ventral, stomach, showing departure
of duodenum.

anhs
1957

Aphelocoma coerulescens

4

18 Apr. 1957

from slightly ~~left~~^{right} of midventral line around ~~left~~^{right} side of ~~proventriculus~~^{stomach} with an apex on the dorsal surface. On the ~~left~~^{right} it does not lie on side of gizzard, but there are some intestinal folds between these two organs.

Proventriculus: It was necessary to cut open the lower part of the esophagus, proventriculus, and gizzard to get exact delimitations. Opened down left side. Prov. is little more than expansion of esophagus - not muscular. Folds of esophagus extend part way into prov., but lower part of prov. lining is smooth. Prov. measures 10 mm. in length.

Gizzard:

Measures $26 \times 20 \times 11$ mm., longest dimensions. From prov. it curves ventrally, so prov. opens on dorsal side, top. Lined with horny material outside of which is a fairly thick layer of muscle. Muscle layer is thicker anterior and posterior, thinner on the sides. Gizzard is 7 mm thick at posterior end, 6 mm. at anterior end., average 2 mm. on sides. Opening to intestine is far anterior on right wall, near proventriculus. Contains a few small stones, a large number of seeds, but most material is so broken up ^{as to} be unrecognizable. Except for some fat & one intestinal loop, forms entire ventral body surface.

ahs
1957

Aphelocoma coerulescens

5.

18 Apr. 1957.

Duodenum: Leaves gizzard far anteriorly on right side. Runs posteriorly along gizzard, curves to left beneath gizzard. (i.e., posterior). Goes slightly to right of midline before turning dorsally and posteriorly into a section running anteriorly along descending loop, between liver (st lobe) and gizzard. At top, where it would run into liver, it turns dorsally again and descends as small intestine. On its first descending loop, the duodenum is thin walled but large in diameter.

Spleen: absent.

Pancreas: A two-parted structure, in the loop of the duodenum. One part lies on ~~the~~ right side, along body wall. It is 13.5 mm long, up to 5 mm ^{thick} ~~thick~~, tapering to a point anteriorly. The other part is connected at the posterior end, near the duodenal loop, and runs anteriorly between the parts of the duodenum. It is very narrow, but fairly long, ending at the level of the start of the duodenum.

It measures 16 mm. Pancreas is attached to duodenum by a mesentery for most of its length, but I can find no ducts leading into duodenum. Outer part of pancreas has its anterior end at bottom of rt. lobe of liver.

Small Intestine: At anterior end of second part, duodenum turns dorsally ~~to the right~~, running along lower edge

18 Apr. 1957

of right lobe of liver. Turns a little left and descends in about mid-dorsal line to end of coelom. Then turns ventral, a little right, to bottom of right liver lobe, ~~venter~~ dorsal + posterior, and again ventral, making a coil of $2\frac{1}{2}$ loops. Included is another dorsal descending part, + a ventral anterior-ward part. The latter goes anterior but then loops, to about liver, turns to left + loops ^{ventral} between duodenum + gizzard, here going toward right. A little right of mid-dorsal line, it goes to dorsal body wall and turns straight posterior. At this turn is a fold of intestinal lining which may be a valve. Extends into large intestine or colon from here.

Large intestine: from above mentioned turn, which is a sharp right angle, the gut goes directly to cloaca. The intervening section is 30 mm. long.

Midway, i.e. 15 mm below turn, paired caeca come off. (Tried a thread at fold) There is no valve structure evident at level of caeca. Intestinal wall definitely becomes thicker here, tho, and is thicker for rest of its length.

Caeca: Paired, on ventro-lateral ~~side~~ walls of gut. Openings are very small, almost obscured. 6 mm. long. Extend anteriorly along intestine, bound to it by connective tissue.

Misc: There is a cord from right lobe

18 Apr. 57

of liver toward first part of duodenum.
From this a duct leads to small
intestine shortly after end of duodenum.

Gall Bladder: none.

Tied a thread at end of duodenum.

Length of Gut:

Cut around cloaca, and pulled entire
digestive tube out. Cut all mesenteries +
removed fat + other tissue in order to lay
the tube out straight. Left it attached
to gizzard, laid it as straight
as possible, tried not to stretch it
but pulled it firm.

From gizzard opening to cloaca - 343 mm.

Duodenum - 52 mm.

tot. SI
= 326

From last turn to cloaca - 33 mm.

From caeca to cloaca - 17 mm.

From string to string. - 260 mm.

Bird is a ♀, not yet in breeding condition.

29 April, 1957

2320 Haste St., Berkeley, Alameda Co., Calif.

Saw a scrub jay fly to the W. gable of
this roof carrying a large object in its
bill. When it laid it down, the object
was seen to be a bird, sparrow-sized.
I could not see what it was. It was
apparently an adult, or fully grown, bird,
judging from its tail feathers, which were
long and notched. The jay, after a
few seconds, flew to the E. gable of the same
roof, + facing W. as before, put the bird at
its feet, apparently standing on it. The jay
picked at the bird, at its chest(?), a few

Banks
1957

Aphelocoma coerulescens

8.

29 April, 1957

2320 Haste St., Berkeley, Alameda Co., Calif.

times, and a few feathers blew away. The jay also had some feathers stuck to its bill. The small bird was dead from the beginning. I cannot say whether the jay killed it. There was another jay nearby, which flew in at the same time. It sat on electric wires, in front of the house. I could not take time to stay and observe further.

→ 18 April

Calculations:

SI/mt.	=	326/94.7	=	3.44	3.44
SI/LI	=	326/17	=	19.2	19.18
SI/Uno	=	326/52	=	6.27	6.27
Uno/mt	=	52/94.7	=	.55	.55
tot. I/ut.	=	343/94.7	=	3.62	3.62
Uno/caec	=	52/6	=	8.66	8.67
ut./caec.	=	94.7/6	=	15.8	15.78
SI-Uno/Uno	=	274/52	=	5.27	5.27

29 May 1957

Berkeley Hills, Contra Costa Co., Calif.

a bird trapped by R. Raitt. Opened 3 June. Ut. 91.7 Caeca 7mm.

Ints too soupy to measure. 1st year nonbreeding ♀. Skull saved.

31 May

♀ ad Ut. 88.3 ova to 2mm. Coll. R. Raitt

Oviductum 65 mm.

Small Int. 363

Large Int. 45

Caeca 7

2nd
1957

Aphelocoma

9.

Berkeley Hills, Contra Costa Co., Calif.

Two more birds trapped by R. Rantt,
same trap.

June 1 ♀ ad. ova to 2.5 mm. Broodpatch.

Oviductum 85 mm.

Small Int. 403

Large Int. 25

Caeca 6

Wt. 94.7 gm.

June 3 ♀ ad. ova ~~to~~ 1 mm.

Oviductum 76 mm.

Small Int 347

Large Int 21

Caeca 6

Wt. 80.2 gm.

26 May, Erroneously secured under Cyanocitta.

♀ ad. Wt. 84.4 gm.

Oviductum 76 mm

Small Int. 420 mm.

Large Int. 31 mm.

Caeca 5 mm.

Parus gambelli

9 June

9 mi. W. Benton, N. slope Glass Mt., 8500 ft., Mono Co., Calif.

Found a nest ~~in~~ in a crack in an old stump. One bird was on nest, the other was in a nearby tree with food. The one in the nest put on quite a display. It puffed itself up, and lunged toward the opening repeatedly, giving a hiss each time it lunged. The ~~crack~~ crack was open from the top, as well as the side, so I could see it very plainly. This hissing has been described, both for young + adult birds of this family. I do not know that the actions have been described. The wings were extended as much as possible in the narrow hole, the head drawn back, + the neck fluffed out. The lunge moved the whole body forward, extending the head. A rapid eye blinking accompanied this. The lunges + hisses were very rapid, perhaps 5 a second. The bill was closed ~~all~~ all the time. The nest is made of some flabby gray material which raises a dust with each lunge. I poked in a stick, which she struck at. Finally I moved away + ^{it} she left nest. The nest contained at least 1, I could not see more, young, no feathers but sheaths well out. They continued to bring food as I wrote this. 0845. Cold wind today, no sun. A pair of Bush-tits joined the bird in the tree in protesting my presence.

obs
1956

Parus inornatus

1.

20 Apr. 8 V corner Dec Art Annex - Titmouse giving buzzy note here in *Quercus*.
Flew a few feet E. to 2 *Acacia* trees, back to *Quercus* and into hole in sheet metal in side of building. Came back out in just a few seconds. In a few minutes returned, again giving buzzy note, entered hole again for a few seconds, came out head first. (May not be same bird). One came about 6 minutes later, more of a song, but did not go near nest. Just came to about 40 ft. + left. Soon (2 min) one came buzzing and holding food. Sat and regurgitated in *Quercus* for a minute. Joined by another bird, silent, whose tail shook violently just before entering hole. Noisy bird then entered after first one left. Concl: Both birds are feeding young. Saw no removal of fecal sacs. Sighting bird 14 minutes later, regurgitated in tree for about a minute, entered hole, remained inside for over a minute, ^{came out} + sat in 2. for $\frac{1}{4}$ - $\frac{1}{2}$ minute, its tail + wings shaking violently from side to side. ~~Remained~~ Reentered hole for 15 sec., returned and regurgitated a few times, then left. In about 2 minutes another flew silently into tree, regurgitated, then entered hole, returned immediately, flew away. Heard a chip from inside nest while it was in. Within 2 minutes another came, lit on edge of hole but did not enter, then flew away.

Banker
1956

Parus inornatus

2.

25 Apr. SW corner DecArt Annex - Young still in nest. When I hit wall under hole, they make a lot of noise.

30 Apr. This morning young were very loud and could be heard from a considerable distance when I approached the nest.

1 May Young still in nest and making a loud noise, both when I tap wall and when parent birds feed. Both parents in area.

11 May Young birds are still in the nest. Both parents still feeding.

12 May No sounds from tapping on side of building. Young have either left nest or been killed. No sign of young or adults anywhere in area.

24 June Black Hills, 2.6 mi N Orinda Village, 10200 ft. Contra Costa Co., Calif.

Caught in mus. special mouse trap, baited with walnut. Chaparral, N. side hill.

Ad ♂, testes 1 mm, no fat. Skull very thick.

1957

Pigeon 12 June 1957

1/2 mi. S. ~~Laurel~~ Spring, 6400 ft. Esmeralda Co., Nevada

In Pigeon, in a canyon off the Pigeon Spring road, ran into a flock of 6 or so plain tits. Shot 1, which was in bad shape, saved head only for identification. It is a ♂, testes 2 mm. Shot another of same group later, skin # 222, a juvenile ♂.



Smith, D.C.
1956

Psaltiriparus minorina,
Bush Tit

- 19 Mar. S. Men's Ice Club. - Group of about 6 feeding in grass, on lawn. First time I ever saw these birds on ground.
- 29 Mar. N. note St. Men's Hall - Several gathering a fuzzy sort of nesting material from Live Oaks. Are they getting it from the branches? It looks like it. Also active in Sequoias.

957.

10 June.

1 mi. N Indian Spring, 7500± ft., Esmeralda Co., Nevada
This is a very common species, perhaps the most common, here in the Pinon woodland. Saw many mated pairs. Shot 1 of a pair, later shot another pair, all out of Pinon. ♀ had brood patch, ova to 1 mm, large oviduct. □ 211.

Krebs
1957

Parus sp.

1.

21 Dec. 1957

2.8 mi. WNW Richmond, 1275±ft., Jefferson Co., Ohio
shot 2 chickadees out of a flock that included
several more, plus tufted titmouse, *Parus hristor*,
Sitta carolinensis. Also in area *Dendroica*
pubescens and *Centurus carolinensis*.
Skins #259, ♀ ad. and 260, ♂, ad. (skulls
2 layers.)
They were foraging in branches + trunks of
leafless hardwoods.

23 Dec. 1957

2.1 mi. WNW Steubenville (Post Office) 1180±ft., Jefferson Co., Ohio.
Got 1 chickadee in the area overlooking "the Rocks,"
near Parmaristum at the foot of our hollow. It
was alone but I had seen others, and titmouse,
nearby. It is #263, ad. ♀ with slight tat.
Later examination of these chickadees showed
one from Richmond to be *atricapillus*, the
other two are *carolinensis*.
Also on 28 Dec., in the Richmond locality
and nearer Jefferson Lake, several
other *atricapillus* were seen.

Skins 263 and 259 = *P. carolinensis* *extimus*
260 is apparently a *P. atricapillus* intergrade,
looks like *practicus*, measures like *P. a. atricapillus*.

Sauke
(1957)

Sitta pygmaea

8 June

9 mi E Jct. 395+120, N. of Mono Craters, 1 ft., Mono Co., Calif.

Heard and saw one bird here. Appeared to be carrying something in its bill. Could not get a shot. Mt. Chickadees in same area.

9 mi W Benton, N slope Glass Mt., 8500± ft., Mono Co., Calif.

Shot one of 2 birds out of a Jeffrey Pine.
See journal for area description.

Banks
1956

Chaemias fasciata

20 Apr. Acacia, S.E. corner Walnut Avenue - Men - tit
feeding in 2 acacia trees. When he sang his
tail vibrated in proportion to the speed of
the trill, (up+down). Joined by another
from ^{branch} across path.

Black Hills, 2.6 mi. N Orinda Village, 1020± ft., Contra Costa Co., Calif.

24 June Caught in mus. sp. mammal trap
baited with walnut. N. side of hill in
chapparel. ♂, testes 4 mm, no fat.
Apparently adult, but skull not as thick
as the Parus inornatus just before.

? July ♂ caught in rat trap, walnut
bait. Too bad to save. Left testis 2.5
mm. Broodpatch. Weight 15.8 gm.

hs
956

Thryomanes bewickii

23 June Black Hills, 2.6 mi NWinda Village, Contra Costa Co., Calif. 1020 ft

#95 ♂? no fat 10.5 gm.

N. side of hill, mus. special baited w/
walnut. Chaparral

24 June #^{RCB}100 ♂ Testes 1 mm no fat

100+ yds from #95, in mus. special trap.

Very thin skull. Lousy skin.

15 July #117 imm ♂ in mus. sp.

whs
1956

Toxostoma redivivum

Black Hills, 2.6 mi N Orinda Village, 1020 \pm ft, Contra Costa Co. Calif

14 July ♂ found near spraying mouse trap. No
marks visible, but skin on neck was torn.

In chaparral. 88.3 gm, testes large.

Banks, R.C.
1956

Turdus migratorius
Robin

1

- 26 Jan. Parade by Men's Gym, U.C. Campus - large flock feeding on berries of Cotoneaster. Flew back and forth to Unitarian church yard across street. Suddenly all movement ^{+ sound} stopped except for a warbling like note from robins. Most birds dropped out of sight, but a few sat on cyclone fence. Movement, at least rapid or long moves, not evident for several minutes, but notes and snatches of song increased soon.
- 10 Feb. Main entrance Agr. Bldg. - Robin chased song sparrow off singing perch. I think this was accidental, as Robin was just flying by.
- 13 Feb. Bancroft Street along Ath. Field - feeding on berries - seen here frequently, often accompanied by Cedar Waxwings, as they were this day.
- 24 Feb. U.C. Campus - lots of Robins today.
- 7 Mar. U.C. Campus - Robin singing this morning. First time I've heard Robin giving full song, in earnest, this year.
- 9 Mar. Robins singing again today.
Eshleman Rd, E of adm. Bldg. - large flock of birds including Robin, Cedar Waxwings, Hermit Thrushes feeding on berries.
- 16 Mar. Eshleman Rd - a Robin, & I think, with at least 2 outer primaries on right wing, maybe some under wing coverts, alone.
- 9 Apr. Behind Wesley Foundation, Bancroft + Hara - Robin gathering nesting material. Flew into large live oak with mouthful of grass + weed stems.

Banks, E.C.
1956

Turdus migratorius
Robin

2.

10 Apr. E. Drinnelle Hall, Lognat Tree (S side)
Building nest about 9 ft up in lognat tree, center one on south. Very tame - came to nest while I was beneath it, not 2 feet away. She is carrying mud. She brings a load, arranges it in nest, sits in nest and arranges, then flies off toward creek. The outside of the nest is almost entirely chickweed *Stellaria* (?), still green, but wilting. This hangs down and is very straggly, not neat like most Robin nests.

20 Apr. NE corner Men's Fox Club - Nest in *Umbellularia*, about 30 ft from stream level, 25 ft from water level. In fork in large NE branch. Very straggly outside and bottom, with material hanging down a foot or so. From chirping of a bird beside she is incubating.

E Drinnelle Hall, S. side Plaza - Have not seen any activity around this nest since 11 Apr.

27 Apr. S of SW entrance LSB - Nest on horizontal branch of live oak (Q sp.), 12-15 ft above ground, where a cluster of small branches originate. Pair of birds on ground in area. SE corner LSB - Robin building nest in fork (at main trunk) of cypresses, about 10 ft high.

30 Apr. NE corner Men's Fox Club - Bird sitting on nest this morning.

Ans
1956

Turdus migratorius

31

- 7 May N. Men's Fac. Bldg. - A nest in the fork of a tree about 25 feet high.
- 11 May NE corner Men's Fac. Club - This bird ^(♀) was sitting on nest. All of a sudden it left. It flew W about 40 feet, began chasing a Fox Squirrel. It flew at it with a loud wing fluttering, veered off, and attached again. I did not see it actually hit the squirrel. It chased it out and around the nest and about 80 feet beyond the nest. Immediately after squirrel was out of area she returned to nest. About 5 min. later ♂ flew to nest, ♀ flew off. Then young raised heads and were fed. ♂ left shortly after feeding. The young appear to be at least as much as old (from my position 30 ft. away). I did not hear any sounds from either young or adults.

Banks
1957

Turdus migratorius

4.

29 Mar. 57

U.C. Campus, Berkeley, Alameda Co., Calif

Near Adams Bldg. saw a bird sitting on ledge holding a beakful of nesting material. First indication of nesting I've seen this spring.

Bancroft along Ath. Field, Lower Sec.

Found 3 left secondaries + 12 back feathers, which checked later in MVZ turned out to correspond to T.M. propinquus.

Womer Men's Family Club

Beginnings of a nest in Berberis.

15 April.

After a few days work this nest was deserted.

22 April

Garden S of Men's Fac. Club, Campus

Found remains of a bird in 3 parts - head with remnant of skull, wings and breast, and posterior and tail + legs. Brought one tarsus and foot, and 3 extraries to M.V.Z., identified it as a Robin.

26 April

S. of LSB, campus

A nest about 10-12 ft up in a tree, against main trunk where 2 small limbs grow out + up. ~~It was~~ nest One bird^(?) left nest as another ~~bird~~ approached. It looked like it fed, then left. Later ♀ came and settled on nest.

10 May.

S. of LSB.

Alfred Giovinnini found one bird dead in nest + gave it to me. It was already hatched when nest was found by him. May. 3. 39.7 gm. #193.

Banks
1957

Turdus migratorius

5

15 May

W. Gate of U.C. Campus, Berkeley.

A pair of robins very tyrannically guarding a nest, chasing even White Crowned Sparrows and House Finches from the area.

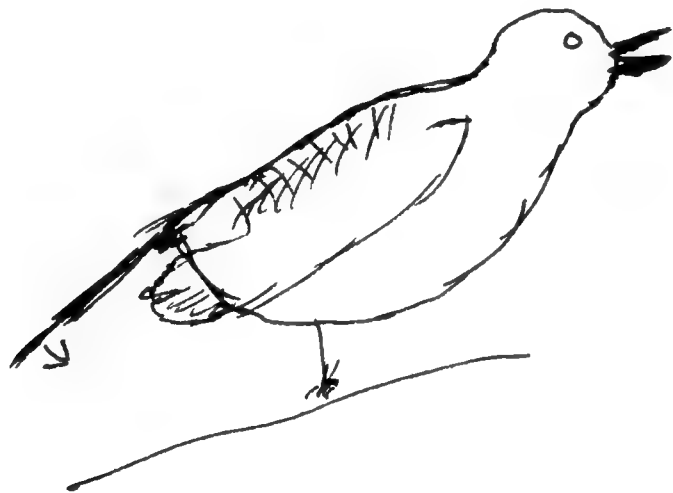
24 May

Can see 2 well grown young sticking up over sides of nest.

23 May

2214 Haste St. Berkeley Alameda Co., Calif.

A robin (♂?) sitting on roof next door. The bird was caroling, giving 3-5 short groups of notes, pausing before next song. Each time he sang, at the beginning of each group of notes, his tail was depressed slightly. He changed position several times, but the action was always similar - a bobbing of the tail (actually a dipping) at each group of notes, or 3-5 times a song. Most of the time his wings were not folded back, but held partly open and a little drooped.



Banks
1957

Carpodacus cassinii

1.

June 14

Mouth of Sweetwater Canyon, 7300±ft., Lyon Co., Nevada

As I was going along the cottonwoods in the stream bottom, I turned to go up the slope toward the nearby piñon. Two birds flushed from the ground at the top of the bank, and I shot them both, one on either side of the trail. One (#230) was a ♀, laying or about to, she had a well developed brood patch. There was an egg 10 mm. in diameter near the end of the oviduct, without shell. Other eggs 8, 6, and 3 mm. were about ready to leave the ovary. I only found 1 collapsed follicle. She weighed 34.2 gm, was rather fat. Skull 2-layered. The other (#231) was a ♂ with testes 7 mm. He weighed 29.0 gm. Both the crops were filled with seeds.

Crocker Guard Sta., 5 mi N 2½ mi W Beckwouth, 5260±ft., Plumas Co., Calif.

12 October

Shot 2 birds from a small flock forced low and to the ground by the rain. One, a ♂ with minute testes, was very fat, no sign of molt on inside of skin. This is skin 272, wt. 28.3 gm. The rear part of the skull was 2-layered. The other bird, 273, was a male also with minute testes. It was not nearly so fat, although it weighed 30.0 gm. The skull is completely single layered. On the inside of the skin molt is evident on the crown, neck, throat, and on the ventral and dorsal tracts, all parts. There is no sign of sheath on the wing feathers. The first bird had a seed in its crop.

chs
1957

Carpodacus cassinii

2.

12 Oct.

Crocker Guard Sta., 5 mi N 2 1/2 mi W Beekmantown, 5760 ± ft., Plumas Co., Calif.

I thought I had some notes about the flights of these birds but cannot find them. All day Sat., and possibly Fri. afternoon, we saw small flocks of finches. They were giving a characteristic finch flight note - a chip. All were flying the same direction, as I remember and check back on the map it was.

They flew fairly high and fast, and as a rule did not alight anywhere around our camp, but flew on. However it became very cloudy Sat. afternoon, and rained a lot. During these rainy spells the flights were forced down, and landed on the ground and rocks near camp, still giving the same notes. They were still very mild, but I shot two, as described on the preceding page.

This looks like an imm. ♂ in post juvenal molt with little fat, and an ad ♂, very fat. What I consider the younger bird is heavier, but less fat. Has the ad. already had his post nuptial molt? Wing plumage on both is very good.

Skins prepared and these notes written on Feb. 3, 1958.

Banks
1956

Horreus naevius

24 Dec.

1. 8 mi S, 1 mi E Orinda, Contra Costa Co., Calif. 700 ± Ft.

Shot two of these birds in the afternoon.

The first, a ♀, was out of a leafless tree, probably Buckeye (*Aesculus californicus*), that at first to be a *Umbellularia*. This bird was

very tenacious of life - took 3 shots, all hits, to kill it. The other, a ♂, was out

of an *Umbellularia*, for sure, on first shot.

It fell a long ways. A big featherless patch on its rump where a shot hit.

Tried to skin second one, no good. Both birds were so badly shot I had to throw them away. Saved the ♂ skull

as PCB #147.

Both skulls were completely 2-layered. The ♂ showed some signs of molt. He was fat.

Zank
1957

Hylonichla guttata

9 March 1957

U.C. Campus, Berkeley, Alameda Co., Calif

Saw several of these thrushes around campus.

Noticed the wing fluttering when they are perched, as Dr. Miller had mentioned in 113. It is a rapid flicking (2-3 flicks) of the wings. Very noticeable character, once observed.

Banks
1956

Hylorichla ustulata

U.C. Campus, Berkeley, Alameda Co., Calif.

3 Nov. A bird outside MVZ, in Horse Chestnut on N. side of building was observed at least 3 times in flycatcher-like activity. At least once it flew out and up, at an angle of approx. 60° with horizontal and out about 20 ft. (or more). It caught a large insect (moth?). The other jaunts were shorter and more nearly horizontal. Each time it returned to about the place it left. The first two flights were close (in time), the third some minutes later. After the third, a black Phoebe (*Sayornis nigricans*) replaced it in the tree. Whether it was chased I can not say. (See Bl. Phoebe, sp. acc.). All this happened about 12:30 P.M.

Sialia mexicana

26 Jan. 1957

Tres Palmas, Vallejo Valley, 960±, San Diego Co., Calif.

A large concentration of these birds in this area, esp. around the water. We got 5 all told.

PCB. 164 ♂? ad. 33.1 gm.

WLM. 6 ♀ ? ?

JCO. 25 ♂ ?

testes large (4mm)

JCO. 28 ♂ ?

CST. 177 ♂? ad. 29.6 gm.

18 April

1.8 mi S., 1 mi E Orinda, 750 ft., Contra Costa Co., Calif.

 Shot ♀ (by appearance) of a pair. It was sitting high in the dead part of a tree (*Umbellularia*?)

wt. 26.7 gm. Bird is (on dissection) a ♀, but ovary not large O, and largest ovum under 1mm. Plumage is worn, esp. wings + tail (flight feathers)

Sialia currucoides

12 Oct. 1957

Crocker Guard Sta., 5 mi N 2½ mi W Beckwourth, 5760± ft. Plumas Co., Calif.

Shot 2 birds here on fence. Frozen until 4 Feb. 1958 when I put them up. # 274 probably ♂, couldn't find gonad for sure, but a black spot (shot size) was seen. # 275 had black testes, left = 3 mm., so I think black of 274 was testis also. Both fat, 274 more so, but it was lighter. 274 also ~~some~~ showed signs of molt on inside of skin on crown. - very slight. Both birds had completely 2-layer skulls.

Sands
1957

Phainopepla nitens

26 Jan. 1957

Tres Palmas, Valiente Valley, 9000 ft., San Diego Co., Calif.

A large group of these birds here in a very loose flock. Mostly looked like birds of the year, but a few ad. ♀ + ♂. The call is very distinctive as they fly, as are the white wing patches. These birds didn't seem to be feeding, just flying around + sitting. Shot 2 young ones, Walt got an ad. ♂. I put up 2, #163, 166. #166 had testes about 3 mm. The other one was done by John Andrias, #26, ♂, ad. plumage.

sub
1957

Vireo gilvus

18 April

1.8 mi S., 1 mi E., Orinda, Contra Costa Co., Calif. 750± ft.

Shot a singing bird moving thru the edge of
the live oak woods. #181. ♂ 10.8 gm.

Left testis was 6 mm, white. Had to
leave skin part way thru preparation, it
dried a lot.

248
1957

Dendroica aestiva

4 Sept.

U.C. Camps, Berkeley, Alameda Co., Calif.

A yellow warbler, apparently rubiginosa was found dead on camps and brought to MVZ by W. E. Ferguson of Entomology Dept. Wt. 11.6 gm, skin 248 R.P.B. It was very fat. Sex unsure, probably ♂, immature. Skull one-layered, a little doubling in extreme rear.

Dr. Miller found one dead near his home the same day.

ahs
1956-7

Dendroica auduboni

Alameda, Alameda Co., Calif

6 Dec. 1956 Mrs. J. Kelley brought a dead specimen in to MVZ and gave it to me. It was found dead in her neighbor's garden in Alameda. It was a ♂, (143) and imm. by the skull. Good plumage, the skull was 2-layered in the posterior part, single layered anteriorly, about half way on the crown. The line was nearly straight across the skull.

5 Jan. 1957

Berkeley, Alameda Co., Calif

Roy Albridge found the bird, put it in the mail box. It was too far gone to do, so made only skull & wings.

25 Jan. 1957

Eggers, Cone Break Canyon, 1200± ft., San Diego Co., Calif.

Shot a bird out of a Cottonwood tree. John Andrias put it up as ♂ 24, ♀, 11.7 gm.

11 October 1957

Crocker Camp, 5 mi N Berkeley, 5760± ft., Plumas Co., Calif.

Saw a rather large flock, at least partly of these birds, moving thru a grove of aspens.

18 Dec., 1957

U.C. Campus, Berkeley, Alameda Co., Calif.

A bird found dead on campus brought to MVZ.

Dendroica naylorae

13 June

Sweetwater.

Just as we drove up and parked, I spotted a bird in the top of a piñon. Ned & I both looked at it with binoculars, couldn't get positive identification but thought it was this species. Ned shot at it with 410, must have wounded it. We chased it and I shot ~~at~~ it with .38 amp. It flew off and may have dropped into the stream, which is very swift. At any rate, search as we would, we couldn't find it.

This is the second record of this species from Nevada. Miller got one in the Grapevine Mts. on 7th June 1940.

Banks, R.C.
1956

English Sparrow
Passer domesticus

28 Jan. Berkeley Women's Club, Durant St. - Birds going in and out of tiles on roof. Chipping loudly. Seems to be investigating, maybe even claiming, territories + nest sites.

4 March UC Campus Berkeley - Several nosing around, & entering cliff Swallow nest at NE corner Durant Hall.

20 April E Side Quinelle Hall - Pair evidently has nest in cliff Swallow nest here. ♂ sitting with head sticking out.

1957

18 March 1957

22426 Bancroft, Berkeley, Alameda Co. Calif.

Several pairs gathering nest material across street (by Edwards Field) + nesting under the tiles of the roof of this building.

ahs
1957

Agelaius phoeniceus
Reckwing.

1.

18 April 1957


1.8 mi S, 1 mi E Orinda, 750 ft., Contra Costa Co., Calif

Take a few of these birds in net but hilly pasture. Mostly ♂. Sang + called from anything sticking up over the grass. Very often in clumps of thistle. Killed one bird, ♂ plumage, 66.4 gm. Put it in Formalin for dissection for Comp. Anat. project.

Dissected this bird 1 May 1957. Bird is ♂, left testis 9 mm.

Removed left lung and heart for better view. General aspect much like jay, but smaller of course. Liver seems more ventral, less lateral, possibly comparatively larger (rt. lobe)

Esophagus: opens from pharynx, goes as a wide tube for first 20 mm, then narrows considerably. Almost could be considered a crop. Continues dorsally to run under liver. Right at top margin of liver widens into proventriculus. This is very near to mid-line, a mill bit to left of center.

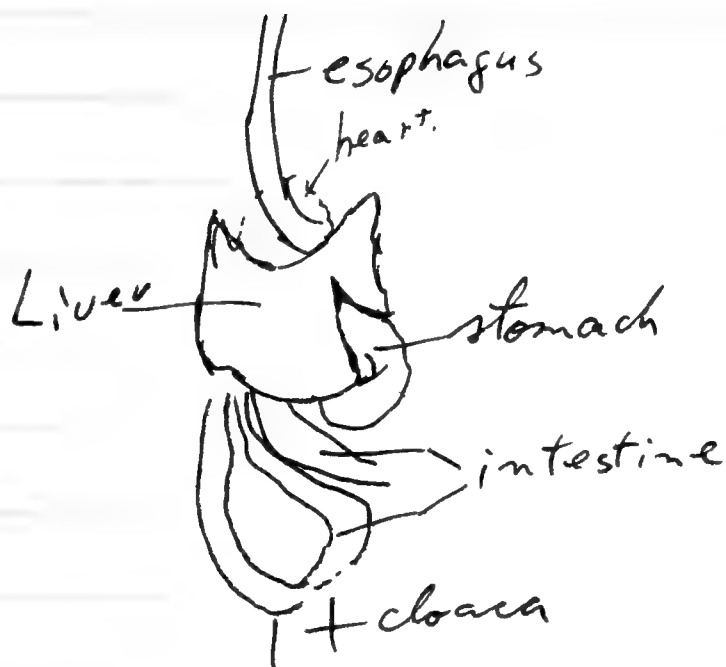
Liver: two distinct lobes, right much larger. Left lobe extends very slightly to right side of body. ^{Right} ~~Left~~ lobe has one extension of posterior part well to left of ~~to~~ mid-line, and one narrow anterior projection to mid-line ^{on} dorsal body wall. Left lobe has ventral pointing projection just left of mid-line. Left lobe generally triangular, right lobe roughly rectangular. 

Banks
1957

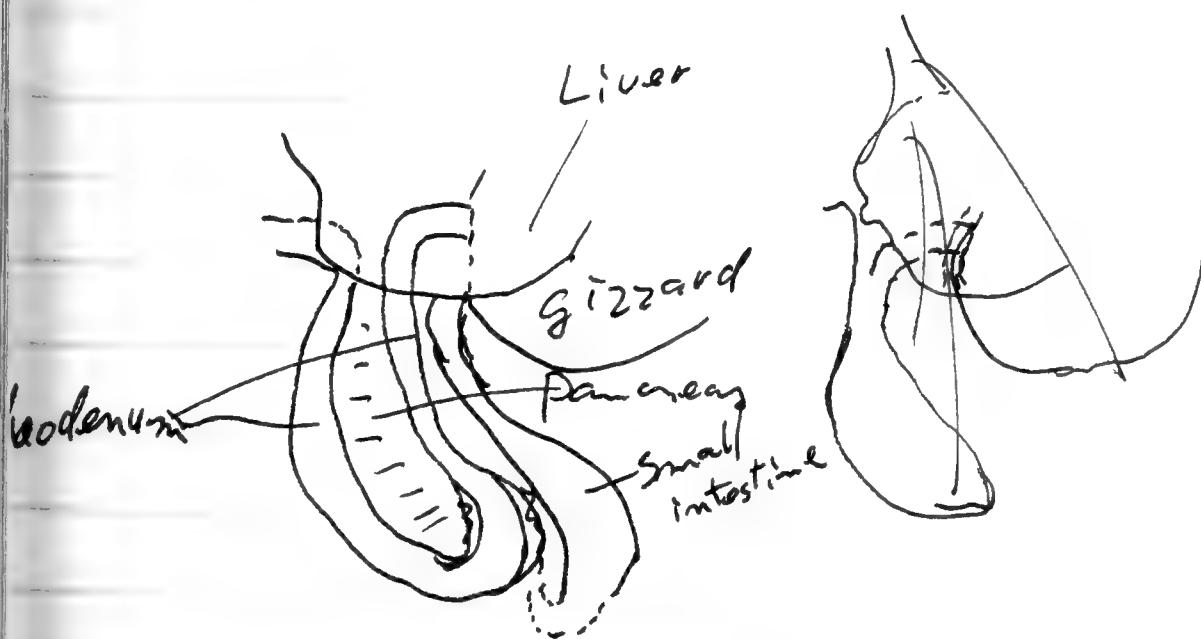
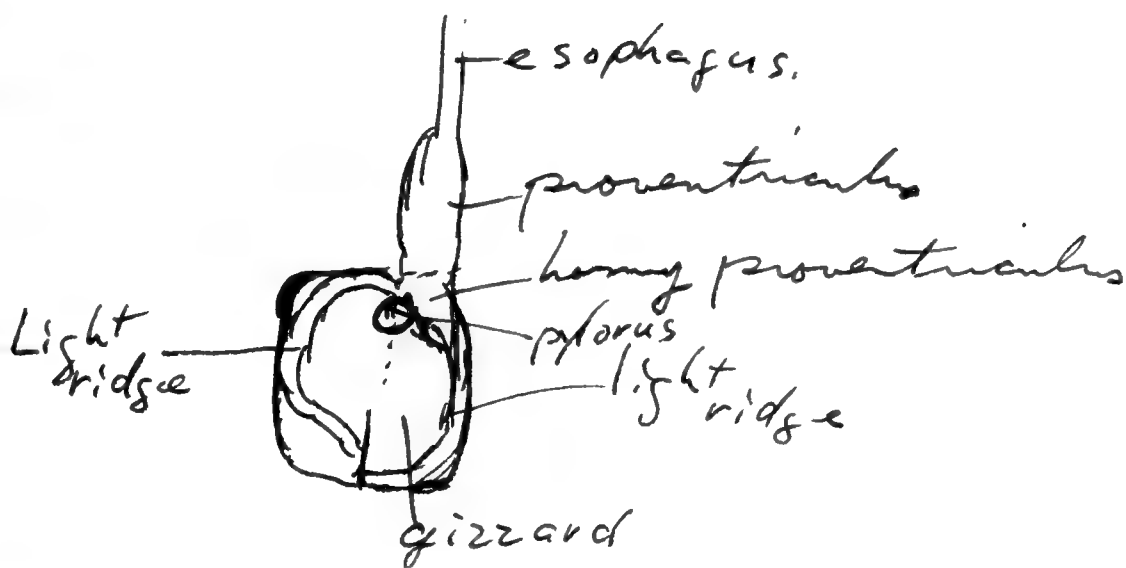
Agelaius phoeniceus

2,

18 April 1957



general view,
intestinal tract



ahs
1957

Agelaius phoeniceus

3.

18 April

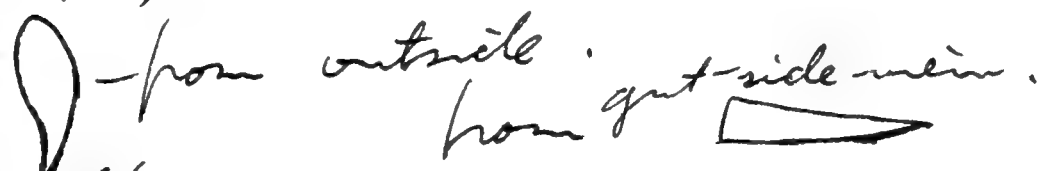
Proventriculus: Very clearly marked from outside. Esophagus suddenly widens, & is quite expanded. A sulcus extends from dorsal part of gizzard across prov. Esoph. is smooth on inner surface for most of way, but has folds for last part, which extend into prov. Wall of prov. is considerably thicker than that of esophagus. Vallis lined w/ horny layer from sulcus down (see pg. 2) but wall is not real muscular to horny ridge.

Gizzard: Very thick-walled. Lined with horny layer. Contained a number of small yellow seeds and what looks like grass (leaves). Apparently all vegetable material. No gravel.
~~Ventral~~ ^{Posterior} wall 7 mm., ~~Ventral~~ ^{Posterior} wall 5 mm., thick. Lateral walls fairly thin. Dorsal wall 5 mm. Light colored ridges on outside correspond to heaviest parts of gizzard wall. They seem to be girdle-like or maybe glandular areas in muscle of wall. These areas do not appear to be muscle.

Crocodenum: Opens from right wall of gizzard, anteriorly, ~~to~~ just below prov. Extends on right side of body as loop to bottom of coelom. ~~to~~ somewhat center from ventral, swinging left to midline. Turns dorsal and right, loops back anteriorly to lower edge of right lobe of liver. Pylorus hidden by liver. End of crocodenum barely under

edge of liver.

Pancreas: Solid structure filling entire loop of duodenum. This part is triangular shaped, but outside is a round triangle.


 -from outside.
 from gut-side mem.

Another part of pancreas in intestinal loop mass. This piece lies medial to duodenum + first part of pancreas - it is flat with a large part posteriorly, tapering into a narrow part at the end of the duodenum.

Small intestine: At the end of the duodenum, the gut tube turns dorsal + extends on right side of body, posterior to right testis, to dorsal body wall. Here it curves posteriorly + medially, remaining dorsal to end of coelom. At this point it is at mid-line.

It then turns ventral, making a short loop, continuing turning in a vertical loop. From here it passes the end thru the loop and with a sharp angle passes ~~back~~ anterior, starting at midline.

{ this loop from dorsal ~~ventral~~ ^{posterior} to ventral
 { posterior to ventral ant. to dors.-ant. to
 { dors.-post, where it goes thru. It goes
 { to the right.

This is dorsal, but ventral to very first loop of small intestine. Again turning posterior it loops to mid-line and goes ventral, turning posterior between gizzard and duodenum, then it turns dorsal slightly right of mid-line to dorsal body wall. Then it angles

ahs
1957

Agelaima phaeacina -
phoeniceus

5

sharply, and curving left makes a half moon to cloaca.

Large intestine: About midway, and at furthest left point of half-moon, the paired caeca come off. From the last angle, the gut widens - the large intestine is no wider than the last part (i.e., post-angle) of small intestine.

Caeca: Left caecum, 3 mm. Actually is ventral, other is right or lateral. Extends anteriorly along ~~large~~ small intestine, tight to its outer wall.

Right caecum extends at angle from gut wall, and is 2 mm. long. Both are light colored.

Misc: There is a duct from liver leading to intestine just at bend that marks end of duodenum.

Lengths: Cut out cloaca, removed gut by cutting all ligaments. Tube broke just after end of duodenum, where shot had pierced it. Stretched gut out as flat as possible w/o stretching its tissue.

Tot. St = 163

Duodenum 41 mm.

Small int. to last angle 110 mm.

" " to caeca 122 mm.

Caeca to cloaca 10 mm. 173

Last angle to caeca 12 mm.

total length 175 mm.

Linings: Duodenum. - completely lined with villae, muscle layer thin. Small intestine - upper part like

duodenum, with villae. Villae less numerous on duenum, lower part of small intestine is thin walled without villae.

Large intestine — ~~thick~~ thicker walled than small intestine. Very small entrances into caeca, cannot see a valve arrangement here. However, the dorsal or left wall of the gut here is in a loose fold which, when cloaca is pressed toward head, folds in blocking passage. No flap valve.

Calculations:

ST / wt.	= 163 / 66.4	= 2.46	2.45
ST / LI	= 163 / 10	= 16.3	16.30
ST / Lno	= 163 / 41	3.98	3.96
Lno / int	= 41 / 66.4	.62	.62
Tot. I / int	= 175 / 66.4	2.64	2.64
Lno / caec	= 41 / 2.5	16.4	16.40
wt. / caec	= 66.4 / 2.5	26.6	26.60
ST - Lno / Lno	= 122 / 41	= 2.98	2.98

Banks
1956

Brewer's Blackbird

28 Mar Edwards Field - Two pair of birds.

One ♂ gave a wheezy note, at the same time bowing his head, fanning his tail and spreading his wings. He did this several times. Occasionally the ♀ would answer with a similar note, but I did not see her action. Soon the ♂ picked up 3 pieces of nesting material, one long weed stem, one piece grass(?), one fuzzy stem, and flew out the side of Field, which would be along Fulton. The other pair flew off a long ways, toward Uofal Press (?). First ♀ frightened by a Calif. Jay, flew over it and toward where the ♂ had gone.

Smith
1957

Piranga ludoviciana

1.

31 May 1957

Dana St., Berkeley, Alameda Co., Calif.

Ruth. A picked up this bird
in the 2300 block of Dana St. about 0730.
She gave it to me shortly thereafter. I took
it home + put it in freezing part of ~~refrig.~~
thawed + refroze it on 3 June, thawed it and
put it up 4 June, 1957. (RCB. 2018) It is ad. ♂, but
testis too soapy to measure. (large). Brood patch.
Bird very fat - under every feather tract
were globes of yellow fat. Tore skin
several times trying to remove fat. Bird
had a bare patch on throat when found.

subs, P.C.
1956

Pine Siskin
Spinus pinus

- 4 March NW Wheeler Hall, UC Campus. - Some 20 of these birds feeding in low juniperus at corner of building. Very pretty. They would sit on top of a branch, pick things off bottom of it, stretching and craning was very interesting. Yellow wash along primaries very evident. Some seemed to have dark faces, others more or less same color as rest of head. When disturbed flew as groups to Cedrus across street to corner library.
- 9 March - SW corner Campus Apteris - Flock of about 10 birds feeding in Juniperus.
- 18 April - U.C. campus, Berkeley - Small flock seen feeding on (or in) Live Oak.

Banks
1956

Carpodacus mexicanus

- 19 Apr. 2310 Ellsworth Ave., Berkeley Calif. - A nest
here in small tree by building entrance.
Bird was sitting on nest, flew when I shook
tree. Nest is about 10 feet high (from
ground). Bird flushed sang in its
fluttering flight lit in a tree not far off.
- 20 Apr. E side Wee Art Annex - ♀ & ♂ sitting on
top of same post. He was fluttering wings
and tail and singing. She ignored him
and flew away. He calmed down in a
minute and also flew away.

Banks, R. C.
1956

Pipilo fuscus
Brown Towhee

1.

13 Feb. Between LSB + Calif. Hall - Pair may have been copulating, or at least very near ready. Loud trilling, sounded like both birds, also some scuffling.

Mar. Eshleman Rd. campus - Pair Brown Towhees in road. ♀ posturing, with wings spread and tail lowered, crouching some. When I approached, she hopped away, retained position. This lasted several minutes. I didn't try to get very close, but she kept hopping away.

26 Mar. Alameda St., near corner of Telegraph - Brown Towhees copulating. She was crouched, wings spread, tail straight up. He was on her for maybe 10 seconds. When they parted he went one way, she went the other, trilled once. Both fed in grass.

15 May S. end Westgate field - Found two young birds under *L. leucophrys*. Thought they were young white crowned sparrows at first. They froze and the only movement was blinking their eyes, until I tried to pick one up. For more details see *Zonotrichia leucophrys*, 15 May 1956.

7 July Black Hills, 2.6 mi N. Orinda Village, Contra Costa Co. Calif.
10200 ft. Ad ♀ caught in mus. sp.,
walnut bait. 53.2 gm. Ova to 1 mm.
Broad patch. Hadn't seen this sp. in the area.
105. Under

27 Oct. U.C. Campus, Berkeley, Alameda Co. Calif. -
Saw a bird bathing on top of the hedge. The leaves were very wet from rain the day & night before. It hunched down and moved forward some to bathe.

Banks
1957

Pipilo fuscus

2.

27 March 1957

U.C. Campus Berkeley, Alameda Co., Calif.

Saw a bird with a $6'' \pm$ twig crosswise in bill in horsechestnut outside MVZ. Sat for a ~~few~~ minute \pm , dropped twig, fluffed feathers, sat, then flew away.

8 April 1957

Stream E of Union, opp. Fountain

a Brown towhee nest. Found this nest the other day, recorded it tentatively as a Song Sparrow (See *Melospiza melodia*, this locality, 5 April) Nest empty then. Now I am 5 ft. from nest. Bird is sitting on nest. The nest is in a brush thicket, mostly *Rubus*. It is ~~set~~ above ground. Looks like large song Sparrow nest.

10 April, 1957

Nest empty today - no eggs. Nest not disturbed otherwise.

~~22 April, 1957~~

~~Garden St. Men's Fac Club.~~

6 May 1957

Corner Bancroft + Dana, Berkeley.

For second time, saw a bird with 1 of the central rectrices (probably on right) albino.

? May 1957

Several days after last obsn., saw same bird. It also has several white flecks in its back. Saw it two days in a row at close range.

whs
1956

Pipilo erythrophthalmus

1.

23 June Black Hills 2.6 mi N Orinda Village, Contra Costa Co., Calif., 10225 ft.
#93. ad ♀ 38.3 gm ova to 2 mm brood patch no fat

#94. imm ♂? 38.8 gm no fat

Caught in walnut baited mouse traps
about 25 ft apart. In Artemisia
chapparal. See journal for description
of area. W side of hill.

24 June #98. ♂ ad 41.0 gm no fat Testes 7 mm.
Very close to 93 + 94, probably the ♂
parent of that family.

#99 ♂ imm 39.6 gm no fat

W. side of hill, maybe 100 yds. from
93, 94, 98. In Mangonita

14 July #109 ♀ ad ova to 1 mm. Brood patch.
in mus. sp. No fat. Under Mangonita.

1957

22 April, 1957

Garden, Men's Fac. Club, U.C. Campus, Berkeley, Calif.

Found nest by flushing ♀. Nest is a cup
sunken into ground amid spreading
branches of Berberis. Nest has 4 eggs, with
light ground color heavily spotted with
very fine rust brown spots, giving appearance
of a light brown egg. Cup is $2\frac{1}{2}$ inches
deep, 3 in. across. One egg may be
hatching, or maybe ♀ poked claw through it
when she took off. 0745

No change at 1800 hrs.

23 April

Flushed ♀ off nest again. Still 4 eggs.

25 April

Same at 0630 today.

Bahr
1957

Pipilo erythrophthalmus

2.

29 April

Garden, Meris Fac. Club, U.C. Campus, Berkeley, Calif.

No change this P.M.

30 April

3 young and 1 egg this A.M. at 7:30

2 May

Young appear in good shape after 2 cool + wet days. Did not count them.

1910 Collected 1 young. Appear to be 2 left.

13.1 gm. All primaries + secondaries out, most coverts just thru skin, 8th Prim. is 2+mm. Some humeral feathers barely thru skin, back (mid-) some even less. Inside of mouth red, lined with yellow. All feather tracts dark, except lower abdominal. Thigh has just a few spots. Tail represented by extremely short down.

6 May

Collected another young bird at ~~0830~~ ⁰⁸³⁰ ±.

Wt. 22.5 gm, 8th Prim. 17.5 mm.

Alula, rt. primaries 1-6, 9, rt. greater prim. cov. 4, left prim. 1, 2, 4-9, left greater prim. cov. 1, 4, 7 are out of sheath. A few feathers on crown, neck, many on mid-back + humerus also out. Abdominal tracts out, but not throat or chin. Flank all out, thigh partly. #192.

whs
157

Amphispiza bilineata

12 June 1957

1/2 mi. S. Pigeon Spring, 6400 ft., Esmeralda Co., Nev.
Flushed this bird + it flew 50 ± ft. and landed
on ground between sage. It was in a
flat covered only by sage + other scrub
species, no pinion. It was a ♂, testis brown.
Weighed 13.7 gm. Catalog no. 221.



Banks
1957

Aimophila ruficeps

23 Jan. 1957

S. side Mt. Russel, 1550 \pm ft., Riverside Co., Calif.

Shot 2 birds in high grass and low sage, at base of hill. In very rocky area. One I watched on the ground at about 6 feet was foraging in an open space between rocks.

The field marks are very distinct at this range. Both birds too shot to put up. One weighed 26.7 gm.

Spizella breweri

11 June 1957

Indian Spring, Indian Mt. MacGrouber, 7300 ft., Esmeralda Co., Nev.
Flushed a bird from a nest. Shot her. It was ♀,
with egg in oviduct. She was apparently
incubating 3 eggs already in nest. Flushed
her yesterday A.M. also, may have been
incubating then. The nest is 2 ft. high
in a sage. Three eggs are small, size of
song sparrow eggs. Light blue ground
color, spotted on large end, mainly in
a ring, with brownish + rusty spots. A
very few spots on all surface except large $\frac{1}{4}$.
Nest is of sage twigs + bark shreds lined
with brown + a few black hair like
tendrils or root fibers.

These birds are very common around this
area. They sing often, the song is a very
distinctive series of buzzes of various sorts,
quite extended.

Later, watching another pair carry food
to a nest near our "cabin". They fly
low, just over sage bush tops, in an
undulating flight which takes them
below bush level often.

12 June 1957

$\frac{1}{2}$ mi. S. Pigeon Spring, 6400 ft., Esmeralda Co., Nevada
Shot 2 birds here, both ♂ with testes 5 or 6
mm. Made them both into skeletons.
Shot one out of pinion after flushing it from
sage brush, got the other in sage.

duke
1956

Junco oreganus

- 17 Apr. 1715 hrs. Dana entrance to campus, S. LSB.
♂ bird gathering small green items, probably ^{along stream.} worms. Put a large mouthful. Flew W. between road and creek.
- 18 Apr. 0600 hrs. Same? ♂ bird gathering same stuff, flew same direction. About 0730 he was not there, not flying by farther down stream.
- 7 May SW LSB - Adults feeding fully grown young (or nearly fully grown)

1957

26 April, 1957

S of LSB, Campus - A pair feeding at least one flying young. An awful lot of chipping going on.

1958

20 Feb. 1958.

Corral Hollow, Alameda Co., Calif.

One bird collected, REB 277. Ad ♂, tes. 1 mm.
This bird came to me in response to squeaking; others present later did not respond. This one was shot out of a large *Quercus* on the side of a grassy hill.

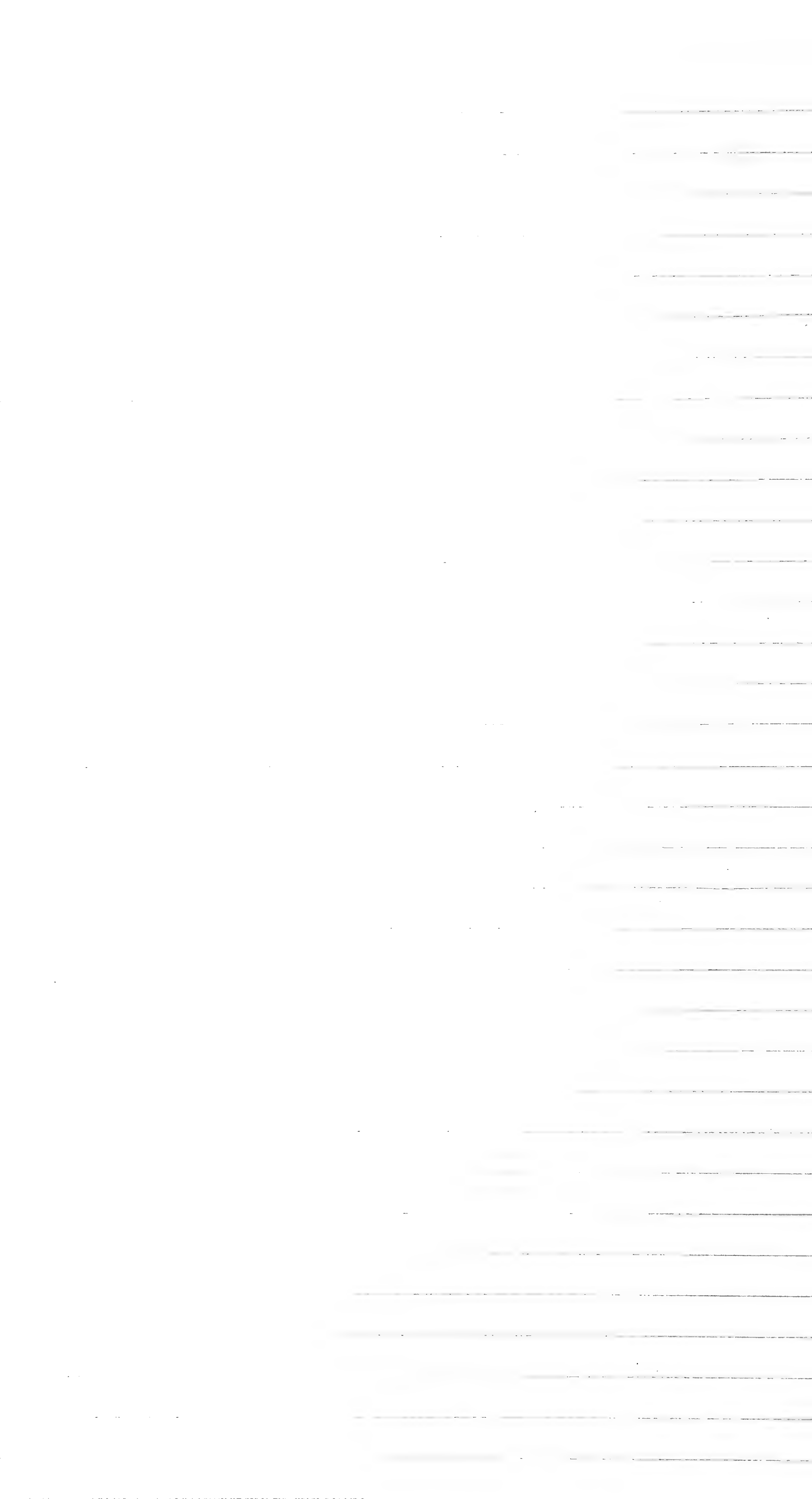
8 Feb. 1958

2214 Haste St. Berkeley, Alameda Co., Calif.

A bird found dead in yard this date, ad. ♂?,
Frozen until 22 Feb, when put up as REB 278.

23 Feb. 1958

A bird banded. Ad, probably ♂. No signs of molt.



Smith, R.C.
1952

Fox Sparrow
Passerella iliaca

31 Mar. 1.8 mi S., 1 mi E. Orinda, 7501 ft, Contra Costa Co., Calif.

Caught one bird in trap at entrance to wood-rat house. Neck severed but skin^{ok}. Ruined the bird, but saved wings. (ACB-73) Unsexed.

6 Oct. Collected 1 bird with Jay's .410, on edge of thicket. Pretty shot up. Too bad to save.
♀, 1 layer skull.

Banks
1957

Melospiza lincolni

27 Jan 1957

Eggers, Cone Brake Canyon, 12000 ft., San Diego Co., Calif.
Caught this ad (ster) ♂ in a museum special
mammal trap during the morning or early
afternoon. It was in the area of tall cones,
along the stream. Trap baited with peanut
butter. Weight 15.0 gm *169. Good shape
but lost a few feathers from back.

R.C. Banks

Species Accounts

1956-1957

Zonotrichia leucophrys

Banks, R. G.
1956

White Crowned Sparrow.

1.

28 Jan. S.W. corner Men's Gym, campus.

Small flock (4♂4♀±) feeding in grass.
Along Erickson Dr., E. of road bridge.

One bird sitting flat on ground, not standing, hopped a bit for short distances. May have had broken or missing leg. Member of small flock.

31 Jan. Between LSB and Calif. Hall

Small flock, N. of walk.

10 Feb. Bancroft St., along Ath. Field.

Pair of White Crowns. Have seen them for several preceding days, act very secretive. Today one sitting about 4 ft high, sang several times. The other flushed from under some Cotoneaster, then continued feeding pretty much in open. Singing bird flew W. when people approached, sang in another bush, then was silent, feeding on ground in that area. I judge singing bird a ♂, other ♀. ♀ gave note a few times, a sharp, high pitched "peent". ♂ came back into open to feed more readily than ♀ after pedestrians passed. Farther east in same strip, another White Crown sang. Did not bother the first pair. This pair was E. of drive going into Ath. field. Fed in grass. One (♀)? carried piece of food into bushes. Other followed. Pedestrian came, both birds flew E., disturbing Song Sparrow. Pedestrians chased W. C. W. again, where both lit about 4 ft high in a bush. One gave "peent" as before. This one was bolder, sat in

Bark, R.C.
1956.

White Crowned sparrow.

2.

10 Feb. Bancroft st., along Ath. Field.

edge of bush in plain sight. Soon began to sing. Evidently ♂. ♀ more concealed, farther in bush. After ♂ sang 3 or 4 times, both flew to lower cement wall farther W. sat about 3 ft. apart ♂ continued to sing.

Door to Men's Gym at least 6 White Crowns feeding in grass. Paid little attention to passersby. Soon flew into juniper, apparently feeding on berries.

11 Feb. Bancroft st., along Ath. Field, across from Epis. Church. 2 pairs of White Crowns, very close.

13 Feb. White crown flushed as I walked by, gave sharp "peent" note. In a few minutes another white crown sang feebly. A little farther E. another white crown feeding in grass. Gave sharp notes, warbled a bit. (Not sang). Another close by chirped several times. Just north E. of mine into Ath. Field, another pr.

Entrance to Men's Gym. Flock, mostly immature, feeding.

Fulton St., E. of Allston Way, by ticket office
Pair of white crowns feeding in grass. Not much nesting cover around.

Between LSB and Calif. Hall. ♂ White crown singing loudly in tree (group of trees S. side of area). Another (♀) was present. Soon one chased the other into Thuja and shrubs around flagpole. Fed on ground near flagpole. ♂ still singing in Thuja over an hour later.

Birds
1956

White Crowned Sparrow.

3.

17 Feb. Bancroft, along Ath. Field, across Epia. Church
2 White Crowns. One sang a couple weak songs, the other was feeding a little distance away, flew to wall along Ath. Field. First one gave "peent" note, seemingly alarm. 4 other white crowns feeding in grass a short distance E., but W. of drive onto Ath. Field. Between LSB and Calif. Hall. a Bird singing in Thuya about 12 yds. S. of flagpole. Bird hidden in bush gave "peent" note when I approached, remained hidden. One on top (♂) continued singing, ♀, inside, gave warbled trill. ♂, disturbed, gave ~~warbled~~ fanned tail several times, changed position and fluttered wings. Movement of branches indicated that ♀ had moved very close below him. ♀ returned to original position, warbled twice more. ♂ continued to sing, bobbed or wagged tail a few times. ♀ gave repeated "peent" as pedestrian traffic increased. This seems to be at or near the location Blanchard studied.

24 Feb. Bancroft, along Ath. Field. One White Crown feeding in grass. Flew to cement wall, then to Cottonwood Tree. After a few minutes flew to sidewalk, where other joined it. In a few minutes both were feeding in grass. Near W. end of strip, by central ticket office. About 30 yds. farther E., another pair stayed hidden in shrubbery.

Banks, R.C.
1956

White Crowned Sparrow

4.

~~24~~ Feb. Between LSB + Calif Hall Heard 2 loud songs from around N entrance LSB. Very weak answers from bird in top of Thuja N of flagpole. A couple loud songs from near Calif. Hall. Bird in Thuja continued singing, very weakly. Few minutes later a bird singing fairly strongly in Cedrus by ledge, N. of walk. Stopped singing, 2 birds feeding in lawn near tree. Both flew to Thuja near flagpole, then fed on walk and under tree. I walked to steps, as I got there Wh. C. gave "peent", started to sing. Could not see other bird. In Juniperus. While one bird was singing nicely in Juniperus another began to sing weakly in Thuja N. of flagpole. Songs alternated a while, both stopped. I noted no particular difference in the songs. Thuja bird began feeding in grass. Flew to Thuja near flagpole, fed there.

27 Feb. N. of Biochem Virus Lab, steps between buildings. - One White Crown feeding on Juniperus. Spotted Towhee + Hermit Thrush also present. White Crown gave loud note. Maybe another (duller crown) not sure, came, but flew when pedestrian came down steps. 2 birds came in momentarily, flew to large tree to nest. Not sure of species.

Between LSB + Calif Hall - Bird singing in top of lime oak S. side of lawn near walk. Flew E, sang at N side Calif. Hall.

29 Feb. Bancroft, along 4th Field, W. of Ellsworth a pair of White Crowns here. When disturbed they flew to top of wall, and into field.

Banks, E.C.
1956

White Crowned Sparrow

5.

4 March. Bancroft St by Ath Field N of Ellsworth
2 Sparrows widely separated, ♀, I think,
at W. end of strip, ♂ I think, about center.
Both very shy, neither singing. A
little farther E, a pair of White Crowns.
Feeding in grass with pair of Brown
Towhees. This is almost to drive into
Ath. Field. Another pair White Crowns
right at corner of Bancroft + Banc.

Barrow Lane, opp. S end Ad Bldg. One
White Crowns on hedge. Sat very still,
ate something off a leaf. A bird (sp.?)
flew into a bush from behind me. The
bird on hedge immediately began to
trill, fanning wings up & down very
rapidly.

7 March Corner Ellsworth & Channing, Berkeley
Heard White Crowns sing once about 7:20 PM,
after dark, about 10-12 feet up in a palm tree.

8 March Bancroft, along Ath. Field, lower part.
Two birds feeding in tops of Juniperus. One
flew across Bancroft, hit on house roof. (22:14).
Other remained and fed. Flew from Juniperus
to lower shrub, called sharply 3 times.
After a minute called once more. Silent for
several minutes, no response to my squeaking.
Center part same area - Three birds here. One
flew into shrubbery, fought(?) with another,
immediately flew out to cement wall where it
started. One left in shrubbery chipped for
several minutes, feeding in grass. Third bird
trilled in bush under bird on wall. Bird sat
on wall for few minutes, disappeared.

Banks, R.C.
1956

White Crowned Sparrow

6.

8 March, Bancroft, along Ath. Field, center part.
Now have 1 bird feeding in grass about 25 yards from ⁴ others feeding in grass. One of the 4 picked up several dead grasses, held them a while, but continued feeding and dropped them. Heard weak songs from single bird, now behind me. Group split up, shortly, 2 birds going E. along walk, 2 coming West a ways. As I passed two eastern birds, one hidden in bush began to trill. One in edge of bush flew to wall. One hidden trilled several times, came in near in bush, dropped to grass, crossed sidewalk, fed in gutter. Joined by bird from wall. Worked east into Upper part of this strip.

Edge of Parking Lot, SE door LSB. - Pair of White Crows, one singing. Another pair appeared, and there is some fighting. Two birds singing in trees about 10 ft. apart. After couple minutes, invading birds moved on, to West a ways. Song Sparrow had been singing, stopped when White Crows started fussing. Now none of the birds present, but White Crows singing farther W. Between LSB + Calif Hall - Bird chipping in trees S. edge of area, along walk (Campanile Rd.) Flew toward Durant Hall. Haven't seen the pair I thought had territory here for several days.

Banks
1956

White Crowned Sparrow

7.

9 Mar. Bancroft St along Atl Field, center Section

Two birds feeding. One flew W, toward me, the other trilled. Second bird joined first. One flew clear to W. edge of strip, soon joined by other. Both fed in grass, gradually working east. After about 10 min. they were nearly in front of me. One bird flew into a bush, then about 30 yds. East, where he hit in grass + chipped. Immediately joined by another, trilling, bird. The two fed, working west slowly. The bird by me worked toward them through the shrubs.

Feed in grass 10-15 feet from the pair. As I approached pair, both flew into bush, one flew to ground, then to lower bush. Other soon went to ground, first bird to ground several feet away. Single bird still feeding alone, behind me now as I go E. along Bancroft. Have heard no singing yet this morning, and can only guess at sex of these birds. I

judge this is a bigamist male. No action other than feeding in grass for 10+ minutes.

Upper Section - Flock of birds (9) feeding near corner of Dana.

12 March Center Section - 0900 Pair feeding under shrubs, 25 yds. W. of drive. One flew up to top of wall. There are 4 groups of low shrubs w/ red berries in this section. This is by upper (farthest E.) group. Suddenly 4 birds here, much trilling and chipping, at least 1, maybe 2, pulling at nesting material.

Banks, R.C.
1956

White Crowned Sparrow

8.

12 Mar. Bancroft along Ath. Field, center section

One bird feeding in grass in lower part of section. Joined by a bird from other end of section. One flew to other end of section, joined a bird there. Four birds by uppermost clump of ^{low} small shrubs. Much trilling + chirping. One bird flew across street to shrubbery by church parking lot.

14 Mar. E of Adm. Bldg. on Bancroft Lane. One bird in here, came from by Adm. Bldg., feeding in ground bushes. Very tame, not fly when pedestrians pass. Pulled at dead grass. Another bird came in + they flew to top of hedge, fought all way down then. Later one bird.

Gathered nesting material, dropped it. Fed for good while on shrubs - Another bird came when first one in bush. He chased her over ledge.

~~6:30~~ 6:30 P.M. Bancroft along Ath. Field/Center Sec. Two pairs of birds. Heard trilling and sound like copulation as I approached. Both pairs flew over wall into Ath. Field. One pair flew to trees by W. door of Men's Gym.

15 Mar. NE Corner Durant + Ellsworth - Bird singing from Acacia Tree. Went about 10 ft. to another tree. Flew away.

Wank, R.C.
1956

White Crowned Sparrow

a

15 Mar. Barcroft along Ath. Field ^{center section} - 2 birds
flew chipping from middle to W end
of this section. There I heard trilling &
warbling. One bird flew to wall, into
poplar on other side. These things are very
good at staying hidden. One now working
E. thru bushes. Fed at banding bait.
Birds, if present this AM, are not active
yet. 0630

Barrow Lane, S end Adm Bldg (opp.) - One bird
feeding in grass + poppies here.

Ehlerman Rd. E of Barrow Lane - Half Way.

Several feeding in gutter. One on hedge.
Both W. trilled. Some singing weak
songs.

→ Barrow Lane, same as above - 15 minutes
later bird still feeding alone. Fed on willow
cathart. Flew into hedge, ~~either flew~~
was quiet for while. Trilled 3 times,
flew out other side of hedge.

SW corner Calif. Hall - Heard a bird singing
here - sang just a few times, not loud. I
could not locate it. 5-10 min. later

saw pair feeding high in Live Oak at
S end of area between LSB + Calif. Hall.

1815 Barcroft along Ath Field, Cntr Sec. - One
bird along about in center of this section.
Another 2 birds, then a third, flew toward
here from E, where one had been chipping.
Some trilling. Fed on bait grain.

Upper Section - One bird singing from wall.
Another feeding in grass. Moved to bushes and
trilled when people passed. Bird on wall still sang.
I went to wall, trilled & fluttered wings.

Banks, R.C.
1956

White Crowned Sparrow

10.

15 Mar. Bancroft clay 14th Field Upper Section - ♀
flew back to ground. ♂ also went to ground.
I went to street, returned in 1 minute.
♂ sang from ground continuously. I paid
no attention to ♀. 1830 hrs.

Barrow Lane, Near Adm Bldg - Two birds,
one chipping loudly, other quiet in bush,
giving a few soft chips. Loud bird
chased quiet bird over hedge, back over
by higher shrubs 50 ft. S. Then all
quiet. No trilling heard here. 1835

16 Mar. 0715 Birds sitting in small tree.
Flew across street to drive. Fought a little
then copulated. ♂ flew back across street,
♀ followed in a minute. She trilled.

Bancroft N of Barrow Lane - G. Robinson
reported a White Crown carrying food by
wall here. Wall is vine covered, very
high. I am sitting on bank above
wall by hedge, near where they meet.
When I approached I saw a bird fly
from wall area W. to shrubs by
corner. Moved to field. Saw White
Crown carry something, go from field
into hedge. Later one sang in tree, dropped
to ground near hedge, gathered nesting
material. (same bird?) Got large
mouthful dead grass about 1½ - 2 in. long.
Flew to top of hedge, gave "eep" to top of
viney fence, "eep" twice, dropped over
other side. About 3 paces from W end of fence.
Moved to street. In 29 min bird came
from across Bancroft with load of material.

Bank, P.C.
1956

White Crowned Sparrow

11.

Mar. 16, Bancroft E. of Barrow — gave "egg" notes. Flew into river, "egg"ed and hopped in river for about 2 min. My presence maybe disturbed her. She paid no attention to people walking by. Entered river, quiet for about 1 min, returned w/o material. 1 light pole, 2 parking meters + 4 ft. E. of Barrow, N. side of Bancroft, about 8 ft. up in river.

Mar. 17 Barrow Lane N and Adm Bldg. (egg.) Bird carrying nest material, Mate flew toward Adm Bldg. She dropped material, joined him.

20 Mar. Bancroft along Ath. Field Center Section W-2 and W-3 feeding together at 1st + 2^d parts of this section. Another bird singing from around corner on Ellsworth St. Another pair by part 4 of the section. One unbanded, pub. ♂. There were making huge fuss, maybe copulating or fighting. Flew opposite directions. Later, W-2 + W-3 eating popcorn (popped) at extreme lower end of section. Other pair has disappeared. Barrow Lane, E. of Adm. Bldg. — A bird in clump of Photinia. Went thru hedge, into field. Not sure it was White Crown. A bird trilled mightily from small tree, opp. S. end Adm Bldg., when disturbed. Continued chipping after I had passed. Pair in tree. Joined by Song Sparrow, which was chased (not violently). Continued chipping, alarm note. Black cat appeared out of hedge. When it left birds stopped chipping.

ank, R.C.
1956

White Crowned Sparrow

12.

21 Mar. Bancroft along 4th Field, Center Section -

A bird holding what may have been nesting material. It dropped it and disappeared in bush. Another bird sat on wall for several minutes. Very little activity here today.

Barrow Lane, E. Adm Bldg. - Three White Crowns.

One feeding in plant cover (weeds) others across by Univ. Receiving in gutter. One in grass flew to tree, trilled frequently for several minutes.

Bancroft E. of Barrow Lane, N. side. One bird seen across street. Watched for 15 minutes, no sign of activity where I thought a nest was being built.

26 Mar. Bancroft along 4th Field, Center Sec. ⁰⁶³⁰ One pair here, by 4+4+5+4 panels. Feeding in grass. Some trilling. Cannot see hands. No sign of nesting activity.

27 Mar. Barrow Lane, opp. Adm. Bldg. - Nest found in edge of Live Oak, Quercus on slope, about 1 foot from ground, 8" from end of branch. No eggs. Nest completed or very nearly so. Description will follow when I'm sure she won't desert.

28 Mar. Bancroft along 4th Field, Center Sec. - ♂ singing from top of wall, section (panel) 4, ♀ feeding below him. She flew into bushes. He flew W, to panel 1, joined by another bird (?). He returned, ♀ trilled, copulation occurred twice in rapid succession, in bush. He mounted sideways. She had tail raised, wings fluttering. 4 Birds, at least 2 singing ♂, not at all territorial.

Parks, R.C.
1956

White Crowned Sparrow

13.

28 Mar. Between LSB & Cliff Hall - Pair of birds
flushed from Shiya near flagpole.

29 Mar. Bancroft along Ath Field Lower Section -
A singing ♂ bird in Shiya just inside field.
Also sang from wall. Chased an English Sparrow who tried to land close to him.
Then he immediately moved + quit singing.
This is by Pillars around Edwards plaque.
Farther E, the other set of pillars - A pair
of birds seen here. ♂ is singing from
top of pillar. Both birds flew into field.
Inside Edwards Field, SE. corner. Bird ②
above still singing from pillar. Another
feeding on ground. Some sort of a nest
underway in a Madrone, cannot tell
what kind. No sign of bird ① above at
SW corner of field. A singing ♂ on wall
near NW corner, where wing comes way
up over wall.

Bancroft along Ath Field Center Sec. - a ♀ gathering
dead grasses by panel 4. a ♂ higher, W-2,
chipped, flew past her, joined another bird
by panel 3. First ♀ went several places
with material, finally either dropped it or
deposited it by base of small bush by large
dump of lilies, midway in panel 4.

2 April Barrow Lane, opp. S.E. corner Adm Bldg. -
Three eggs in this nest. ♀ flushed when
I got very close. May be incubating.

Bancroft along Ath Field, Lower Sec. - Nest
with 4 eggs. Along wall, opp. large Shiya
(inside) near upper end of sec. ♀ flushed from
nest, ♂ sang from Shiya.

Arks P.C.
1956

Zonotrichia leucophrys
White Crowned Sparrow

114,

4 Apr. Trach Stadium, NW. corner - In a spot here where vines grow up and cover the wall, a white crown nest with 3 young, maybe 3-4 days old. Down appearing over bodies, Gape bright red, outlined in yellow. Two seem bigger + more active than third. Eyes not open. Cold this morning. Hope mother comes back to brood them soon. Both parents flew off. V. Birds squeaking faintly. Barnett along Ath. Field, lower sec., upper part Still 4 eggs in this nest. ♀ flew off nest at my approach, went to wall and trilled.

6 Apr. NW corner Edwards Field Vert C - Tried recording, not much luck. Still three young ones in this nest. Eyes are open. Bills are yellow on outside, red lined with yellow on inside (gape). Feather quills are through the skin. All seem at about same stage of development. Could hear young plainly 30 ft. away when they fed. Adults were alert but made no disturbance when I was at nest. When I left, one bird appeared with food. Hopped around in vines several minutes before going to nest. The other one sang weakly and left. The one with food finally delivered, left again. The young remained quiet in the nest until I touched it, or put my hand above the nest, where the feeding bird comes in. Even my head in that position didn't start them. Once the young birds started

6 Apr. N.W. Lower Edwards Field, Nest C.

squeaking with nothing near the nest. Finally I put the mite in the vines by the nest, hoping to get sounds as she fed them. She was almost ready to approach (I was 12 ft away) when outside noise became unbearable. Twice while hopping around nest she went to ground & gathered more or replaced ^{the} food she had. When I was done, put all equip. away, she fed them, gathered food close by, fed again in about a minute. I sat by singing. & fed again in a few minutes, after some hedging. I never saw her remove a fecal sac. Age of young birds 4 or 5 days.

Barrow Lane, across Ad. Bldg. Nest A -

Took 3 eggs from nest #, put in nest 2, (Song Sparrow), and replaced them w/ 2 Song Sparrow eggs. Song sparrow eggs are smaller, lighter color, not as spotted. I was chased from nest, J. Schnell kept her off, and I made switch. Broke third egg accidentally, left it in nest. I not around when we left.

7 Apr. Barrow Lane, Nest A I incubating this nest this morning. Broken egg was gone but others were there.

8 Apr. I ^{just} incubating ~~the~~ at this visit, but eggs still present.

Bancroft along 4th Field Lower Sec. Nest B - Still 4 eggs here, I incubating

Smith, R.C.,
1956

16.

9 Apr. Bancroft along Ath Field Lower Sec, Nest B
Still 4 eggs, incubation proceeding.
Bancroft along Ath Fld. Lower Sec, SW corner of stadium
Pair acts like there is a nest here but I
cannot find it.

NW corner Edwards Field, Nest C - ♂ ad. holding
food, will not approach nest while I
sit 10 yds ± away. I moved farther away,
she fed them almost immediately. Food
observed thus far seems to be insects or
larvae (small (1") worms). I cannot tell whether
both birds are feeding now or just ♀. Young
no longer raise up when I approach nest. Do
not open mouths when I when I put
hand above nest, or when I touch it. Now
they crouch down in the nest so they
do not stick out, and are effectively hidden.
If I touch them, or the nest, or disturb them
too much, they give a very harsh note,
—, sounds like an English Sparrow.
Seems like a series of notes, too fast for trill
but not quite fast enough for a buzz.

10 Apr. This nest is empty! No sign of
disturbance in the nest, but no young.
♂ bird on top of vines singing. ♀ arrived,
no food in bill. Both birds seem nervous.
Barren Lane, near John Bldg. Nest A - Still
2 eggs. No sign of ♀.

12 Apr. NW corner Edwards field - ♂ singing from wall
about 30 ft. from previous nest. ♀ sitting on
a previously much used perch on vines near nest.
Both flew outside stadium.

Banks, R.C.
1956

Zonotrichia leucophrys
White Crowned Sparrow

17.

12 Apr. Bancroft along 4th Field Center Sec., panel 2
W-2 and W-3 here. Haven't seen them for a
long time. Believe W-2 is ♀, W-3 ♂, but 2
may be turned around. Both chirping
loudly by lilies at end of panels. One
carrying food (look like insects) in
mouth. Evidently have a nest very close,
with young probably just hatched.

W side Verley Foundation, E side Parking lot on Bancroft

Nest (D) in bush by drain spout here.

2 young, 7± days old, legs. First saw
bird on roof of bldg. Flew to ground.
Another bird flew from across Bancroft to
the light pole nearby, under a car, next
seen feeding young. Returned to lamp post,
sang 3 times, flew back across Bancroft.
Assume him to be ♂ because of ringing.
Other bird sat in a bush, fed or at least
hopped around edge of parking lot. In a few
minutes, I returned, flew to nest with
only 2 stops, fed young. Then ♀ flew to nest
and fed young. Both then gathered food
near base of bush.

Bancroft along 4th Field Lower Sec. Nest B

No change

Barrow Lane, opp Adm Bldg - Nest A - Still
2 eggs, both members of pair close by.

E side Trinity Parking Lot. Nest D - At 0945-1030
tried to record these young birds. They crouched in
nest when I held mike by them. No sound if I
touched nest or them. Propped mike a foot from
them, let recorder run. Parents came and
fed after much hesitation. I removed the

Smith, P.C.
1956

Zonotrichia leucophrys 18.
White Crowned Sparrow

12 Apr. E. Side Trinity Parking Lot, Nest D - unhatched egg. Upon examination all the yolk had dried into a dark mass at the large end of the egg. Banded the young. Gort. band $\frac{23}{151603}$ over yellow band on right ~~left~~ leg of one, $\frac{23}{151604}$ over yellow band on ~~right~~ left leg of other. These birds had the feathers broken out of the shafts, about 3 mm. Probably are 8 days old.

13 Apr. E. Side Trinity Parking Lot Nest D - Am recording while I write these notes. See journal for description of activities. Both birds are feeding the young. One of them, the ♂ I believe, has a much whiter head stripe than the other. She seems to be more hesitant about feeding them. This may be due to the noise, or it may be other causes. He comes directly to the nest with insects. She stays ^{or near the} in bush, gathering seeds or small insects. Occasion after feeding he sits in nest bush and chirps or sings. At 0715 I removed a fecal sac after feeding, flew S. to S. end Trinity Church and around corner, a distance of almost a block (100-125 yds.) Could not tell if she carried it all that way or not. Barnett alay Ath Field Lower Sec Nest B - no change. Still 4 eggs. 0800

Banks, R.C.
1956

Zonotrichia leucophrys
White Crowned Sparrow

19.

13 Apr. Bancroft along Ath. Field Center Sec. W-2 + W-3
Watched these birds at ~~panel 2~~ panel 2
and between panels 2 + 3 for $\frac{1}{2}$ h. \pm . W-3
chipped constantly, while feeding or while
just sitting. A very high, loud note.
W-2 chipped occasionally, a much lower
sister note. Behave W-3 is σ , W-2 f .
W-2 had food in mouth for long time,
but would not go to nest. I looked
in bushes for nest, then went several
yards away. W-3 became silent.
Barrow house, opp. Adm. Bldg. Nest A - Nest
destroyed. Some grasses still in tree,
some on ground. No sign of adult
birds.

Bancroft along Ath. Field, Nest B - at 1745 hrs.
one egg had hatched. Nearly naked, pink
skinned, down on parts of body dried
and sticking straight out.

14 Apr. - Now at 0815 all but one egg hatched.
Trinity Church Parking lot, Nest D - These
birds have left the nest at 0815.
Must have been close by, judging by
the actions of the parents.

17 Apr. Bancroft along Ath. Field, Lower Sec., Nest D -
Three young in nest - eyes not yet open.
Feather tracts can be seen through skin.
Roused up but did not make noise when I
looked, then settled down. Did not rouse
again when I touched nest.

Banks
1956

Zonotrichia leucophrys

20.

18 Apr. Bancroftalong Ath. Fd., Lower Sec., Nest B. -

Tried to record these four young today. The noise they made was so quiet, however, I could barely hear it a foot or so away. Today their eyes are open a little, not much more than a slit. When I touch the nest they raise up and open their mouths. Feather quills are through the skin, but not much.

19 Apr. The young today raised up and begged when I looked at nest. Inside of mouth and throat is red (crimson?), and the yellow of the bill gives a lining to it. Feather sheaths are out about a cm. on wings (primaries) but only 3 or 4 mm. on the other feather tracts. One I took out of the nest sat quietly, no sound and no effort to escape. The adult, ♀ I think, who chipped violently while I was at the nest, has a band on her leg. This is W-3 if it is one I banded. I have seen W-3 with W-2 in the center section of this strip, acting like paired birds with a nest.

NW corner track field inside: ♂ singing from wall about 20 ft. from Nest C. ♀ flew up from geraniums below him, and both flew away. I could find no nest.

Banks
1952

Zonotrichia leucophrys

21.

19 Apr. Corner Barrow Lane + Bancroft - Pair of birds. ♀ (determined from later behavior) feeding on weeds, ♂ feeding, then sang from Magnolia. ♀ flew past Magnolia to small Eucalyptus, ♂ joined her. They copulated 4 times; after each copulation, lasting only a few seconds, ♂ flew to ground, returned immediately. Periods between copulations longer than during copulation, about twice as long.

Barrow Lane, opp. Adm Bldg. This is a different pair than above. ♂ singing from tree which held nest A. Flew N about 20 ft., joined by ♀.

20 Apr. Bancroft along Ath Fd, Lower Sec, Nest B - The nest is partly torn out of the bush and all birds are gone. An adult chirped a few times nearby, but not anything like the excitement of previous days.

Opp SE corner Pa Art - White crow gathered nesting material. Attempted to pull shreds of bark from
Gathered large mouthful of coarse material from ground under Acacia, and other bushes. Several times flew into same place in bushes. I'll call this Nest E.

24 Apr. Found what is probably this nest today but it is inaccessible.

Barrow Lane opp NE corner Adm Bldg - Pair, one with nesting material. She flew into Ceanothus (?) on ground, farther patch of this blue flowered running viney shrub to the south. About center of clump.

3 mbs
1956

Zonotrichia leucophrys

22.

27 Apr. Bancroft along ath. Field Center Sec. U-2 and
u-3 seen today with one fledgeling.

30 Apr. Barrow Lane opp NE corner Adm Bldg. Nest F
Found this nest containing three eggs.
No adult birds around, so possibly
incubation has not yet begun.

1 May Bancroft along ath Field Center Sec - A pair
with one young. Could see no bands.
One bird was singing atop wall
probably ♂, other was in bush with
young one.

8 May Barrow Lane opp NE corner Adm Bldg. Nest F
Flushed ♀ from nest. There are four
eggs present.

11 May still 4 eggs, no hatching yet.

12 May SE corner Edwards Stnd. - Watched
a ♂ singing on wall of ath Field Sec.
(Bancroft along ath Field, Lower Sec.) could
not see ♀ or get any reaction from ♂ by
looking in bushes outside of wall.
Went inside located nest, ♀ on it,
about 9 ft. high in top of bush. Cannot
see in it but there must be eggs. Will
call this nest G.

NW corner Edwards Field - a bird carried
food into Geraniums along wall. It
remained. I poked around the area for
several minutes, finally it flushed
(from ground?) but I couldn't find
anything. Repeat performance of
above about 10 min. later. Both
birds were present between. Probably
have young out of nest. Check later.

3 ahrs
1954

Zonotrichia leucophrys

23.

12 May 1956 Barcroft along Ath. Rd., Center Sec. -

Bird singing from Poplar, lower part of section. One or two birds chipping while I was in area. Found nothing either inside or outside wall.

13 May Barrow lane, NW corner Admin Bldg. F

There are 4 young ones in this nest today. They are down covered. When I parted the branches to look they (3 of them) raised up and gaped, but almost immediately put their heads down. One bird is under the others and can hardly raise his head. They made no sound that I could tell hear.

14 May One of the parent birds chased a ♂ Passer domesticus out of the area, about 15 ft. from the nest, just as I arrived this morning at 0715 PDST. Aside from that there was no activity around the nest. There was not much change from yesterday. The birds are a little more active, but still raise and gape only momentarily before resuming "rest" position. In one I removed from the nest their eyes were not yet open but the beginning of feather tracts could be seen under the skin of the head and where the primaries will come. There were no sounds that I could hear.

1730. Weighed the birds and clipped toe-nails. They would hardly stay still on the balance. Very actively crawled about, or even went off the pan. Each time I reached into

3 subs
1956

Zonotrichia leucophrys

24.

14 May Barrow La opp Women Edn Bldg West F
to replace one after weighing it all the
others would raise and gape. Even the
ones last replaced did this. No sounds
were heard. When accidentally piced on
their backs they could not right
themselves. They did not hold themselves
erect on the balance but laid on their
belly w/ their heads stretched out. When
they crawled they used their wings as
"arms" and sort of flopped on all fours.
Eyes not open.

15 May West Gate Field S. End - I bird singing
from top of Cedars. Started chipping as soon
as I got close. Under Lilocedrus tree
close by found ♀ and I think 2 young.
The young one, first one I saw, was
frozen, did not move except for blinking
while I watched until I started to
back away. Then it squawked + flew.
Saw another frozen + partly concealed but
it flew when I reached for it. A Brown
Touhee came and fed these birds (or one).
I must have young Touhees. Still the
White Ravens stayed in tree chipping as
I sat quietly under nest tree. Soon one
dropped to the ground followed by the other
and it turns out that the one I thought
was a ♀ is an almost independent juv.
following around the adult. (♂ from its singing).



outs
1956

Zonotrichia leucophrys

25.

15 May Barrow Lane, NE corner Adm Bldg Nest F

Weighed these birds about ~~18~~ 1730 hrs. They sat up + begged when I touched nest, all but one which seems very weak. All eyes are still closed. The sheaths of the primary feathers are protruding a very little bit, but others are still under skin. All but one active on scales, but not so much so as yesterday. Some of them when handled gave a very weak sound that I could barely hear. It is very high pitched, not loud.

16 May Trinity Church Parking Lot, E. side - Pair of birds making a fuss when I am in bushes here. Cannot find a nest. One of the birds (♀ I think) was carrying food. There must be young on the ground. This is probably the pair that had Nest O. Those young if alive should be independent so this must be a second brood.

Barrow Lane Nest F - Weighed the young about 1730 hrs. Their eyes are open a little bit. Primaries are out in sheaths about 5 mm, feathers on back and above legs just barely through skin. Birds are active but mainly quiet on scales.

17 May Weighed these young ones about 1730. Their eyes are definitely open now. They were so active I could hardly keep them on the balance. This + the fact that the wind was blowing pretty good makes me doubt the accuracy of these weights. However

whs
1956

Zonotrichia leucophrys

26.

17 May Barrow Lane Nest F the only one that may be very far off is R-4, and it may be O.K. Primaries are out about 1 cm. and other body feathers out 1-3 mm. All wing feathers are ahead of all others. Two defecated on the scale, first time they have done that.

The fecal sacs are very strong. There were no sounds today. Only one bird begged when I touched nest - others were sort of apathetic until put on scale. Maybe the wobbliness of the balance pan is what makes them jump so.

18 May Weighed them about 1740 hrs. They all raised and gaped when I reached toward the nest. Later two of them crouched as though the fear reaction had started, but it has just barely started. Feather sheaths are out about 15 mm, and the primaries and most back feathers (much shorter, up to 5 mm.) are breaking through. They made no sounds that I heard, even while begging. Very active on the scales, wouldn't stay on. They very definitely grasp at the nest as my fingers to resist being picked up. Three defecated on the balance.

19 May About 1730 weighed them again. There was no begging as I reached the nest today. Instead they all crouched in fear. Two of them, during my operations, gave fear calls. These are much the same as the calls given by the song sparrows yesterday but much louder. The

Banks
1951

Zonotrichia leucophrys

27.

19 May Barrow Lane Nest F note is almost a trill, composed about 6 notes or sounds given in rapid succession. When they did this, the parents, who were already chipping & hopping about in a nearby bush, really went wild. Their reaction did not last long however. The birds resisted being picked up by grasping the nest or the rock I weighed them in, but once in my hand were fairly still. They did, however, crawl a little while I was holding them. The wing feathers are just barely (1 mm) out of the sheaths, but most of the body feathers are almost completely out. One bird is a little farther advanced in this than the others. The tail feathers are prominent almost out of their sheaths. Wing feathers + sheaths about 20 mm long.

20 May. Weighed these birds about 1700 hrs. L-3 jumped out of the nest and got away, giving a couple of fear notes that set the parents wild. Am astonished at the weights today. Either they stopped gaining or my weights yesterday are all off. Primaries and wing feathers are about 3 mm out of sheaths. Most feathers are completely out, or at least give the appearance of full feathering. R4's primaries are light tipped, but ~~and~~ R3's are uniform dark. At 1800 hrs. returned to band them. L-3 was back in the nest. Got them all banded OK.

Zonotrichia leucophrys

Nest

	14 May	15 May	16 May	17 May	18 May	19 May	20 May
$\frac{1}{R_4}$	5.5 gm	7.3	9.4	13.7	15.6	34.3	34.4
$\frac{2}{R_3}$	6.5	8.7 8.6	10.9	16.1	11.5	35.5	35.1
$\frac{3}{R_2}$	6.7	7.3 8.8	10.9	15.0	19.3	35.5	35.8
$\frac{4}{R_1}$	5.7	7.3 8.2	10.8	14.8	17.2	36.1	

adult

lb. 4 gm
brown

$$\begin{array}{r} 18.17 \\ 3 \overline{) 56.1} \end{array}$$

$$\begin{array}{r} 34.3 \\ 3 \overline{) 102.9} \end{array}$$

$$\begin{array}{r} 16.4 \\ 3 \overline{) 49.2} \end{array}$$

$$\begin{array}{r} 35.5 \\ 3 \overline{) 106.5} \end{array}$$

$$\begin{array}{r} 36.1 \\ 3 \overline{) 108.3} \end{array}$$

Zonotrichia leucophrys

28a

Eads
1956

Barrow Lane opp NE corner Admin Bldg. Nest F

	Mail clipped	May 14	May 15	May 16	May 17	May 18	May 19	May 20	Total	\bar{x}
R4		5.5	7.3	9.4	13.7	15.6	17.9	18.0		
R3		6.5	8.6	10.9	16.1	17.5	19.1	18.7		
L4		6.3	8.8	10.9	15.0	17.3	19.1	19.4		
L3		5.7	8.2	10.0	14.8	17.2	19.7	—		
Total		24.0	32.9	41.2	59.6	67.6	75.8	56.1		
\bar{x}		6.0	8.2	10.3	14.9	16.9	18.95	18.7		
R4 Main	—	1.8	2.1	4.3	1.9	2.2	.1	12.4	$\div 6: 2.07$	1.5
R3 Main	—	2.1	2.3	5.2	1.4	1.6	—	13.2	$\div 6$	2.2
R3 Main										
L4 Main	—	2.5	2.1	4.1	2.3	1.8	.3	13.1	$\div 6$	2.2
L3 Main	—	2.5	1.8	4.8	2.4	2.5	—	14.0	$\div 5$	2.8
Total	—	8.9	8.3	18.4	8.0	8.1	0.0			

Bahr
1956

Zonotrichia leucophrys

29

May 20 Barrow Lane, Nest F The banding
designates the birds thus

R4	= W6
R3	= W9
L4	= W8
L3	= W7

May 21 Visited the nest at 1730 but just
looked. Feathers out, and the light
tipping gives a dark-light striped appearance.
There is a fairly well defined light stripe
down the middle of the crown.

May 22 Visited the nest shortly after 1800 hrs.
All 4 birds still in nest. Picked up W-9
who was on top. Appears to be completely
feathered. Yellowish-tan stripe shows
plainly on crown. Very active & tried to
escape. While I was holding him one
bird left, and when I put him back
the others left. They left explosively,
with a combination of hopping, jumping,
and flying. All remained in the dump
containing the nest. The parents, at
least one, was very disturbed, and
followed me clear across the street, where
I stood to watch. The young actually
fly a few feet.

23 May 0730 Adults very much alarmed.
They chipped constantly, around the
bush which holds the nest, and around
another about 20 ft. away. Both parents
gathered food. Could not see any young
ones.

Banks
1956

Zonotrichia leucophrys

- 28 May Barrow lane, area of Nest F In area of nest did not see either young or adults. As I started to leave saw both adults 25 yds. N. of nest area. Soon heard one singing corner Barrow + Eschleman. No sign of young birds, however.
- 1 Jun Barrow Lane - No sign of birds around Nest F. ♂ singing a little ways South on Barrow.
- 18 July 2214 Haste St., Berkeley A bird has been singing near here for the past several days, after a long period in which I heard no birds.

Bauer
1957

Zonotrichia leucophrys

1.

26 Jan 1957

Eggers, Carlsbad Canyon, 1200±ft., San Diego Co., Calif.
Caught 2 birds with brown crowns, white
barely coming in, in museum special traps,
one in morning one in evening. Both had
completely 2 layered skulls, both ♂,
weights 25.7 and 25.9 gm. #161, 167

Tres Palmas, Vallecito Valley, 9005ft., San Diego Co., Calif.
Shot an adult plumaged bird, wt. 26.4 gm.
#162. Not sure of sex, probably ♂.

Ellsworth. 15 Feb. 1957

Law + Durant, Berkeley, Alameda Co., Calif.

On this corner could hear 3 singing birds,
along ~~the~~ Ellsworth. One was near
Med Bldg. on SE corner; another further S.;
the third about $\frac{1}{2}$ way to Bancroft, between
house + church. This third one has a
peculiar song - I noticed it yesterday
also. The first 2 notes are clear and
loud, but the remainder of the song
seems to get caught in the throat. It
can be heard when close, but is
very weak and soft, not whistled
at all. It will be interesting to see
what effect this has on his obtaining
a mate or holding a territory. Maybe
it is a first year bird and the song
will develop. There was a territory here
last year, but I noticed no odd song.

16 Feb. 1957

Near Med Bldg, Ellsworth + Law, Berkeley

A bird here in corner of parking lot singing in
small piece of ledge, definitely in answer to a
bird around on the side of the bldg. No mate seen

Banks
1957

Zonotrichia leucophrys

2

16 Feb. 1957

Med Bldg., Ellsworth + Dana, Berkeley.

A bird singing in bushes here along Ellsworth. When he sang, frequently answered by one in the bldg's parking lot. Later one across the street by other med bldg. (on SE corner), possibly same bird. This one singing now in Acacia tree at front of Bldg. Believe the one across the street was an echo, or reflection of this one's voice from the other building. I cannot see any ♀ for this bird.

Bancroft, lower part Edwards Field, + plaque, Berkeley

2 (?) birds on column here. No singing. Only one in evidence most of time; that I saw two at first. One flew into field. In a minute heard call notes, one flew W. outside wall, sang. The song is weak, the last part fading away. Song is fast. Saw him on ground. He flew E, past me, to join another bird on top of wall E of E spine (still on W end of field). The other bird flew to the ground, then the singing one (but not singing now). A passerby moved them toward the bushes but evidently didn't scare them much. They fed for a couple minutes, moving by fast hops. Their heads go down and up repeatedly, probably once for each food bit or each try for food. They fed on grass and on sidewalk. A passerby chased them over the wall. This seems to be a pair, but no evidence of mating. No songs heard after the first few weak ones.

Baird
1957

Zonotrichia leucophrys

3.

16 Feb. 57

East Lower Section Ath. Field, Bancroft, Berkeley

One, possibly 2 birds here. No singing.

East Section, Athletic Field, Bancroft, Berkeley.

One very mild pair (i.e., 2 birds) at lower end of this section. No song.

Front of DeClint Annex, Campus, Berkeley

A bird across walk from this building.

9 March 57

Med Bldg., Ellsworth + Durant Berkeley (SE corner)

No birds singing here today (not heard last week). Saw nothing in several minute watch. Then saw 2 birds in tree + on top of yellow house to S. of parking lot. Flew immediately. Soon saw 2 in yard to E., which would be the backyard of a house on Channing. Did not investigate further.

S.W. Corner Ellsworth + Durant.

W. of corner at first drive heard a bird giving loud alarm notes. He? was in a Cedrus tree, growing out of group of junipers, Good nest area. He flew across road to N. into Thuja, then W. one lot + disappeared. No mate seen.

2309 Ellsworth, front of Epis. Church

Heard a bird, saw it on steps of church. Flew into shrubs at 2309, heard the chattering, begging call of the ♀. One bird came out + fed(?) around bare rose bush at 2309. ~~Other~~ It seemed to be interested, slightly, in ^{or feeding dead.} pulling grass. The other one appeared on the church steps, + both flew slightly N. along front of church.

Banks
1957

Zonotrichia leucophrys

4.

9 March 1957

Rear Men's Gym, Campus, Berkeley

A bird singing loudly & constantly from a large shrub at S side of main rear entrance. When I flushed him, he flew to top of bldg. and continued singing. After while he flew back into shrub and stopped for a while. I could find no sign of a ♀ near bush - it seems a very inadequate territory to me. Bird singing again now.

Bancroft, along Ath. Field, Upper Section.

A bird on each side of street here, but neither doing anything.

Corner opp. Bldg. Q

Group of white crowns here, giving very squeaky notes. May be a small wintering flock, but there may also be a nesting pair nearby.

Founder's Rock, U.C. Campus.

A singing bird in this little corner. Ideal nesting area. Could not tell for sure if there was another bird. This one flew across Hearst St. to North. Also Hermit thrushes in area.

11 March 1957

N. side Home Ec. Bldg., Campus, Berkeley 4, Calif.

Dr. Pitelka today told me of a pair seen twice in bushes next to building here. Probably nesting pair.

Yard of Unitarian Church, Berkeley

Heard singing bird here at 5 P.M.

16 March 1957

Dana St., by Men's Gym, U.C. Campus, Berkeley, Calif.

A bird singing here at 5:50 P.M., was answered by one on Bancroft, just below corner of Dana. The one on the gym was on the extreme SE corner of bldg. For a while the

Banks
1957

Zonotrichia l. nathallii

5.

16 Mar. '57

Dana St, along Men's Gym, U.C. Campus, Berkeley
two birds were having a verbal duel, songs coming
about every 7 sec. The one on the gym was
chased by a brown towhee, and quit singing,
but the other continued. Bird on gym
disappeared then. By 6 P.M. the other quit singing
also. Light is fading now.

Bancroft, just W. of corner of Dana, Berkeley, Calif.
Same bird mentioned above. Resumed singing, &
moved down to corner. It quit again. Saw 2
birds in bushes about 15 yds. from corner of
wall. Farther W. to lower end of
center section of athletic field, saw or heard
2 more ~~pairs~~ ^{pairs}.

18 March.

N.E. Corner Durant + Ellsworth, Berkeley
As I walked here toward Bancroft, where the
area next to sidewalk is heavily planted, a white
crown flew from one bush to another, it flew
after a song sparrow nearby. Soon saw
an apparently 1st year bird - crown still
dark - feeding between street + sidewalk.
Heard just a snatch of song from the area.
Many English Sparrows + House Finches around
S.W. Corner Edwards Field, Berkeley, Alameda Co., Calif.
A singing bird. Stayed generally on wall and
on pillars surrounding plaque. Occasionally
inside field. Sang several minutes. Descended to
lawn + fed about 1 min, went back to wall +
sang, then flew W. to small tree + continued
singing. For long while couldn't find ♀.
Finally walked in closer to bushes. Saw
both birds then, giving alarm notes. A few

Banks
1957

Zonotrichia leucophrys nuttalli

6.

18 March

S. W. Gomer Edwards Field, Berkeley, Alameda Co., Calif
minutes later I was singing + ♀ was feeding on lawn. ♀ gave trill. A dog came - one bird gave sharp alarm note, was seen on sloping part of wall (end of bleachers). This note is the ~~old~~ one typically heard when the birds are alarmed at a close danger. Last year it was given mainly when I was in the immediate area of the nest. It is a sharp "chink", dropping a little but essentially 1 tone. Now, 2 min. after dog left, both birds are gone.

22 March 1957

~~Attn.~~ Fulton Street, between Durant + Bancroft.

A bird feeding + chipping in the lawn here, E. side of street. Flew to bushes across street past E B W D parking lot, back of small house.

Athletic Field, Lower Section

When I arrived a bird across street at 2214. Later I thought there may be 2 pr. here. Can't know. Right now a bird chipping near lower columns and big cedar. Chirps a while, disappears a while.

Another pair at upper end of this section, one on wall joined one on ground and both fed moving W. Ran into other pair; one came back, one went with other birds. No chase involved.

Upper Section Ath. Field, along Bancroft

A bird sitting on wall near upper end flew W, almost immediately returned w/ another. Shortly engaged in singing duel with a bird along Dana by Wins Gym. Con't. next page

Banks
1957

Zonotrichia l. nuttallii

7.

22 Mar 57

Barcroft along Athletic Field, Upper Sec.

7:10 found nest w/ 2 eggs along this section.

Mate of bird in singing duel not far from nest.

I on nest, very reluctant to leave.

NW corner Koser's Gym, U.C. Campus, Berkeley

A pair in thick juniper here between walk and building. Very quiet, at least one flushed out of these bushes.

Barrow Lane, opp. N. end Adam. Bldg.

A pair feeding here at same location as Nest # last year, 7:45 A.M.

N. of Home Ec. + Forestry Parking Lot, by Garbner's.

A nest here w/ 3 eggs, A bird on or near nest.

Near fence, in thick bush growing in fence. The nest is high, 6 ft. Had to feel in to see about eggs. About 8:30 A.M.

S.E. corner of Fulton + University Ave., Berkeley

A bird singing from live oak in this clump of trees + shrubs. No sign of mate. The bird flew to slope W. side of Forestry Bldg. but shortly returned + resumed singing, 8:45 A.M.

Corner Atherton + Channing, Berkeley, Alameda Co., Calif.

Jay Schnell heard a bird under streetlight here at 7:45 P.M. last night. This morning at 6:20 there was one singing here also. Later, about 8:45 or 9:00 I heard a bird in the area.

23 Mar. 57.

Haste + Fulton, Berkeley.

at 6:30 A.M., a bird singing on NE corner. Flew to NW corner + sang, then flew E along N side Haste to first lawn, ⁽²²⁰⁵⁾ began to feed. Chased 2 English Sparrows; all 3 birds flew into tree (first tree on Haste); soon this bird sang several times from top. Then disappeared.

Banks
1957

Zonotrichia l. nuttalli

8.

23 March 57

Founder's Rock, Hearst + Gayley Rd., Berkeley

No sign of any birds around here today.

Barrow Lane, opp. Head Adm Bldg, UC Campus.

When I first arrived here at about 7:30 A.M., heard or saw no sign of birds. As I was about to leave, heard a thin lippy note - so went off a ways to watch. Soon saw one bird at just about last year's nest area at edge of walk a couple times. No notes or sounds except the lip. One bird flew down along side of Grounds + Bldgs Bldg. Until present (8:00 A.M.) have heard the lip note from that hedge (S. side Bldg.) Walked thru once, all was quiet, no action or sound altho hadn't seen bird leave. About 5 or 6 a bird was seen on forepost of hedge E of Barrow Lane. I went toward hedge, and a bird (White Crown I think) flushed from ivy along the hedge. It went into the farthest W. tree along the bldg. I resumed my seat on Adm. Bldg. steps. Undoubtedly there is a nest here in this very low ivy but it is very surprising. I didn't find nest. After several minutes the bird had not reappeared, so I left.

Greenhouse area - Nest B

There are 3 eggs in this nest still, and incubation is under way. This must be a complete clutch. I flushed a bird from the nest. The nest is only about 5 ft. from ground, not 6 as I thought yesterday.

SE. corner University + Fulton, Berkeley

Saw 2 birds in this area at 8:30 A.M., one in hedge somewhat S. of trees, one in small, low, pine.

Banks
1957

Zonotrichia l. nuttalli

9.

23 March 57

Inside NW Corner Edmonds Field, Berkeley track

Pair of birds here at same place as a pair last year. One sitting on wall. One appeared, feeding in grass. There is one large clump of vine over top of wall. As I investigated this, a bird in it gave every indication of having a nest. Could not locate nest - it may be on very top of wall.

Inside SE Corner Track Field, Berkeley

A bird under Arbovitae-? tree seemed very much disturbed. Another (young?) bird in corner bush. Does not appear to be suitable nest sites inside stadium. These birds have been very quiet - both today + all spring.

West door Men's Gym, U.C., Berkeley.

A bird singing in tall shrub. It was here earlier in the year. Also I saw it early today (It's now 9:20 AM). Looked for a nest around bottom of the tree earlier, but could find nothing. With just one isolated bush, even this size, it seems unlikely. Bill Maher reports this bird here nearly every day. It may be same bird (probably is) that sings from SE corner Men's Gym.

Bancroft along Athletic Field, Upper Sec., Nest A.

at 9:30 AM, still 2 eggs. Incubation is in progress - flushed bird off nest. Must be a complete set.

Same, Center Section -

at extreme upper part of center section, 2 birds feeding in grass. One seemed to be W-1 of last year. Somewhat disturbed when I stopped to write notes.

23 March.

Barcroft by Athletic Field, Center Section

At extreme lower end, last bushes in this section, a bird flushed from cotoneaster with sharp chips as I walked by. Chips turned into near screams as I looked into bush. Found nothing.

Same, Lower Section

Upper part of lower section - Found a nest without eggs in cotoneaster, one long & one short wall section W. of W. pillar. The bird nearby was very excited. This location is outside wall from previous remarks labeled 'Inside SE corner Track Field'; Nest C. This nest is about 10-12 ft. from a nest of last year.

Farther down on lower section, a bird flushed from a bush to ~~the~~^{the} wall, then flew on down section (W.). At end of section saw the same or another bird. Still can find no nest here.

Corner Fulton + Durant, Berkeley.

SE corner - many shrubs along side of house. White Crow flew from ground to one of these, then past back of house, flying E, probably into the next lot.

2211 Haste St. Berkeley.

Bird singing on ledge along steps. Sang several times, then left. Probably same bird I noted first this morning.

24 March

Greenhouse Area, Nest B

No change, 7:15 A.M.

Barrow Lane + N end Adm. Bldg.

Cannot find nest in ivy. Do not even see birds today. May have been gathering nest material yesterday.

Banks
1957

Zonotrichia l. nuttallii

11.

24 March

Athletic Field, Bancroft, ^{upper sec.} Nest A

No change at 7:30 A.M.

Bancroft along Ath. Field Lower Sec., Nest C

One egg in this nest today at 7:30 A.M.

25 March

At 7:00 AM today, still 1 egg in this nest. Adults do not seem to be around. Deserted?

Farther down in lower section, looked in vain for a nest. Did not see or hear any birds here tho, today. But now that I am way up the line I see 2 birds which I believe are White Crowns in that area (i.e., extreme lower part of lower section).

Bancroft along Ath. Field, Center Section

at 7:10 A.M. found a nest (will call D) near extreme lower end of this section, in Azalea type plant. The nest is very high, about 7 ft.

My arm stretched up reaches just to top. There are three eggs. ~~the~~ Incubation must be well under way. An adult bird chipped very frequently in the row of bushes, a sharp chip, but was not real loud.

Same, Upper Sec., Nest A

No change

Dana, ~~along~~ at SE corner Men's Gym

In large double Arborvitae here I am almost sure there is a nest. Bird was singing from top of it. I got inside tree, & he moved to wall very near me & continued singing.

Heard another bird chip a little & move some but could not spot it. Could not find nest. Tree is very dense along S edge.

S. Side Grounds + Bldgs.

Pair of birds. Found what may be beginning of nest.

Banks
1957

Zonotrichia l. nuttalli

12.

25 March 57

Greenhouse Area, Vest B
No change.

26 March 57

S.W. Corner Ellsworth + Durant,

A pair of birds building a nest on Ellsworth side of this medical building. The one bird I guess, "gathering twigs, grass, etc. from the lawn + street nearby + is flying into the top of the hedge-like shrub at the beginning of the lower back part of building. The other was feeding in the lawn. He was chirping rather loudly at first. Altho I haven't actually found ^(= seen) the nest, will call it E.

Bancroft along ath. Field Lower Sec., Vest C.

Still one egg in this nest. The birds were in the nearby area however.

Sane, Upper Sec., Vest A.

No change

Greenhouse Area, Vest B

No change.

27 March

21 26 Bancroft

At rear of this house, where a white crow flew earlier in week. Today birds chirping alarm notes. Saw a cat in area. One bird in a large bush in yard - am sure there must be a nest here. I chased cat - didn't look for nest.

Sparks Florist, 2125 1/2 Bancroft -

A bird singing on roof here. Much adequate nesting cover around house.

Baird
1957

Zonotrichia l. nuttalli

13.

28 Mar.

SW Corner Edwards Field

Group of 4 Arborvitae here. A White Crown singing from one. 2 Birds chipping in alarm as I moved around trees. I found nothing, but convinced myself they are nesting in one of the trees. This would probably be same pair seen "Lower Sec." of Ath Field. Bancroft along Ath Field, Lower Sec.

Above may be different bird, or false alarm. Still 2 pairs of birds in this strip - one near upper end, one a little below center.

Upper pair probably ones from Nest C, which I didn't check today.

Center Sec., Nest D

No change. No adults here today, but a pair a little further up.

28 March

SW. Corner Ellsworth + Durant

Looked where 2 days ago bird was carrying nesting material. Only nest there is an old one. I see no birds around. Will drop E as a designation. 7:00 AM

Bancroft along Athletic Field, Center Sec., Nest D

No change. This nest measures 7'3" above the ground. 7:10 AM.

Same Upper Sec., Nest A.

No Change 7:15 AM.

Greenhouse Area, Nest B

No change. Height of this nest is 5'3". Saw one of the birds, ♂? a good ways from nest. He flew from ground to small tree, sang once. Almost immediately the other bird came from the direction of the nest & joined him, with trilling, at the base of a small bush. 7:30 AM.

3a hrs
1957

Zonotrichia leucophrys

14.

28 March

Greenhouse Area, Vest D

No change at 5: PM.

29 March

Side Grounds - Bldgs

0650. Three times saw bird carrying nest material from Adm. Bldg. to bushes here. It seems to be building a little more than $\frac{1}{4}$ of the way from the E end.

Barrow Lane, opp. S end Adm Bldg.

0700 Saw a quiet bird in small live oak here. Have seen them here before, also. Did not see any activity.

Bancroft along 4th Field, Upper Sec. Vest A.

No change 0800.

Same, ~~Center~~ Sec, Vest D

No change 0800

Same, ~~Lower~~ Sec, Vest C

4 eggs in this nest at 0805 !!!

Lower on lower Sec

Bird acting very disturbed as I looked in bushes, I partition up from upper pillar on lower end of sec. However, I could find nothing. Along wall here found 3 ~~semi-grown~~ feathers + 12 contour feathers, white crown? \leftarrow (No. See Journal + Robin)

SW corner Edwards Field, Arbor vitae

Under 1 of these trees found piece of egg shell! - looks like Whitehorn egg. What may be nest is too high to investigate. Yes. is Whitehorn egg.

SE corner Fulton (= Oxford) + University

Pair of birds on sidewalk + hedge. Faint song does not quite seem like nuttalli.

Greenhouse Area, Vest B

No change.

ahs
(1957)

Zonotrichia l. nuttallii

15

31 March — Report from ^{M. Taylor} G. Schnell

Greenhouse Area, Nest B.

"Sat. morning (Mar. 30) at 7:00 A.M. One bird hatched at nest B. Marked by clipping right hind toe." Mary

"No more have hatched (8:00 A.M.) (Mar. 31), other than the one Mary ~~etc~~ to be clipped in nest B. fry.

Bamcroft along Ath. Field, Nest A.

No change reported.

Greenhouse Area, Nest B

One young bird with right hind toenail clipped at 1745. Weight 3.2 gm. Only leg. As I held the mirror up to see into this nest, the bird was gaping. On the balance it rolled, could not stay right side up. Moved on balance pan. Was gaping after I replaced it in nest.

Bamcroft along Ath. Field, Upper Sec., Nest A.

No change at 1800, Still 2 eggs, incubating.

Same, Lower Sec., Nest CD

Only saw 2 eggs, altho the 3rd may have been covered by a leaf. There is what seems to be the beginning of a grass platform over the tops of the eggs, as though a new bottom is being constructed. It is very hard to see into this nest, and I have to disturb it some every time. I am sure it was deserted and it appears that a new nest is being built on it, or at least a new bottom for it.

anks
1957

Zonotrichia leucophrys nuttalli

16

1 April

Bancroft along Ath. Field Vest A

No change 0615

Greenhouse Area - Vest B

Weighed the one bird at 0630. Weight 3.2 gm.
I don't know whether to trust these scales. (NW2)
The other egg has not hatched. The bird is
covered with grey down - not completely
covered, but on the head + upper part of
back. There are black spots showing
through the skin on the head and spinal
region. The bird was gaping when I first
spotted it in the mirror, and as I replaced
it and held the mirror again it gaped.
I do not think I was disturbing any-
thing but the branches above and around
the nest - not the nest itself. Its eyes are
not open, but there is a small slit.

Inside NW corner Edwards Field

There is a bird singing on the wall. There
is no activity in the assumed nest region.
I shall once again try to locate this nest.
- No luck. It must be along the top
of the wall, and I cannot get to it.
There is a bird in this clump.

Tennis courts inside Edwards Field.

In geraniums along end of courts, was a
singing bird. There was some disturbance
when I began to look in geraniums. Now
there is a Gambel sparrow singing from that
fence, and other Gambels around. Check again.
Bancroft along Ath. Field, Lower Sec. Vest C.
Today there are 5 eggs.

Banks
1957

Zonotrichia l. nuttalli

17.

1 April

S. Side Grounds + Bldg.

Found this nest, empty, will call it E,
Greenhouse Area, Vest B.

Weighed the bird at 1800 4.4 gm. It very actively begged, as I held it. By now it could sit erect in my hand, but tended to fall over backward. It flopped off the balance pan. Liver and other organs still plainly visible thru skin. Light areas appear to be feather tracts under wings. Remiges appear dark, may soon be out. Made very faint squeaking sounds.
Bancroft, Vest A.

No hatch yet at 1700.

2 April

Greenhouse Vest B

0630, Bird weighs 4.5 gm. Not as active as last night. No change in appearance. When I put the mirror up, it begged, then slouched to side of nest and put head down. Seemed weak this morning.

Bancroft Vest A

No change at 0615.

S. of entrance to Rivinelle Hall

Heard singing bird here. It got silent as I approached + I didn't hear it any more.

S. side Grounds + Bldg. Vest E

Still empty. Bird singing loudly across Barron as I was at nest.

Barron Lane opp. S. end Adm Bldg.

Saw + heard pair of birds. Chipping, very disturbed in area of *Ceanothus* + first small staked tree. Also heard trilling.

Banks
1957

Zonotrichia l. nuttallii

18

2 April

Greenhouse Area, Nest B

Weight at 1820 - 6.5 gm. Primary feathers are out about 5 mm. - just barely thru skin.

3 April.

Considerable change noticeable even now at 0620.

Weight 6.3 gm. Gaped and stretched very up, but still fell over backward in my hand.

Stretched out on balance, no gaping. The squeak is still just barely a squeak, and I must hold it close to my ear to hear it.

Primaries are out 1 mm. now, and the first line of primary coverts are out a little (maybe $\frac{1}{2}$ mm). All wing feathers are started out, no more than $\frac{1}{2}$ mm. (Not all - first line in each area - Primaries, P. coverts, secondaries, Tertiaries.) No others out of skin but plainly visible and about to start out. The bird did not gape until I touched it today, but I did not use mirror today. Did not gape when I returned it to nest.

Bancroft along 4th, Field Nest C

No change

Nest D

No change - still part of new floor. Probably deserted for sure now.

Nest A

No change.

SE. Corner Univ. + Fulton, Nest F.

Found this nest by seeing ad. carry food. Both adults very disturbed! 2 young, primaries out 2 mm. Appear same stage, maybe little more, than nest B. Clipped right 3rd toe nail at one 0855

Banks
1957

Zonotrichia l. nuttalli

19

3 April

Greenhouse Area, Nest B

1805. Not much change from this morning.
Primaries are 2 mm, at most. Weight 8.8 gm.
Gaped when I put the mirror up, but not
when I put ~~the~~ my hand up. Adult bird saw
me remove & replace the young bird.

SE corner Univ. + Fulton, Nest F

Marked - 12.8 gm Prim 3 mm. } 1815 hrs.
Unmarked - 12.7 gm. Prim. 3 mm;

Unmarked bird has eyes slightly open. Other
bird more active. ^{Beg} Began to gape as soon as
I parted bushes. Gaped in my hand. Very
active on balance pan, almost got off.

Nest H

No change. Have not flushed a bird for the
last 3 visits. I think they have deserted.
They are certainly very overdue to hatch.

4 April

Greenhouse Area, Nest B

Weight 9.2 gm. Primaries out 4 mm. 0615
The bird is not very active this morning. It
gaped when I held the mirror up, but did
not stretch up straight. It gaped weakly
on the balance pan. It struggles hard if I
try to put it on its back. Its eyes are
open slightly.

SE corner Univ. + Fulton, Nest F

Marked 13.1 gm 5 mm. Primaries
Unmarked 12.2 gm 5 mm. Primaries

The unmarked bird was much more active both in
my hand and on the balance. Neither bird gaped
when I parted the bushes. 0630. Eyes are
open.

Banks
1957

Zonotrichia l. nuttallii

20.

4 April

S. side Grounds + Bldgs. Nest E

1 egg in this nest today, or 00 hrs.
Barrow Lane, S. end Adm. Bldg.

Bird singing from top of Adm Bldg, other bird
trilling in Live Oak across street. Singing
bird flew to same tree. Both birds very
disturbed as I explored a *Ceanothus* bush,
where there is an old nest, but nothing
new. May be too early for this pair.
They have moved now, to the border
of the territory (?) adjoining nest E's
territory. Much trilling + singing going
on.

SE Corner Univ. + Fulton, Nest EF

Marked 15.6 gm, Prim. 8 mm.

Unmarked 15.7 gm, Prim. 8 mm.

1805 hrs. Marked bird gaped first, but other followed
soon, when I parted bushes. Marked bird has secondary
coverts barely out of sheath. Same as unmarked *Melospiza*.
Unmarked bird defecated as I took him from nest.
This one has no feathers out of sheath yet. Both
birds held on to nest. Both were very active
on the balance.

Greenhouse area, Nest B

Wt. 12.3 gm. Primaries 4 mm

No feathers breaking thru sheaths yet. Did not gape
at mirror. Very quiet in my hand + on balance.

Seems very fresh. 1805 hrs. Seemed to hold on to
nest.

Banks
1957

Zonotrichia l. nuttalli

21.

5 April

Greenhouse Area, Nest B

Weight 12.2 gm., Primaries 6 mm. 0615

The bird remained crouched in the nest when I held the mirror up to it. When first placed in my hand it stayed crouched, neck in (opposite of extended), head and neck horizontal. Was active on balance. Next in my hand, crawled very definitely. No gaping, no sounds. Secondary coverts about to break through.

SE corner Univ + Fulton, Nest F

Marked 15.0 gm Prim 9 mm } 0630
Unmarked 15.3 gm. Prim 10 mm }

Weight of unmarked bird corrected for 2 defecations. First weight 15.8 - defecated on balance and while going back to nest.

Reweighed, weight 15.3. Unmarked bird gaped when I parted bushes. Both appear to be about ready to break thru secondary coverts. Yesterday that marked bird was out some - don't think they are today. Height of this nest 49" (4ft 1")

1800 hrs.

Marked 18.5 gm Prim 13 mm

Unmarked 17.7 gm. Prim. 12 mm

Marked - Some back + flank feathers out of sheaths, Lesser Sec. Coverts also out. Crouched in my hand, head way down. Fairly quiet on nest.

Unmarked - A very few flank + back feathers are all that are out of sheaths. This one doesn't crouch as low. A few coverts are barely out. Both quiet as long as they have something to hold on to, even my finger. But on smooth balance pan they try to move.

Sachs
1957

Zonotrichia leucostriata

22.

5 April

Greenhouse Area, Nest B

1815 hrs. Weight 15.3 gm. Prim. 8+ mm.

No feathers have broken thru yet. Sits quiet on my hand w/o clapping. Head + neck low + flat. Gaped + ~~se~~ squeaked once in my hand.

6 April

0600 hrs. Weight 15.1 gm. Prim. 11 mm. 0600

Crouched low when I put the mirror up. Gave a squeak + then protest notes as I tried to lift it from nest. Some flank feathers + a couple back feathers out now. Also a couple tertiary coverts on each side.

SE lower Univ + Fulton, Nest QF

Marked. 17.45 gm. Prim. 13 mm. 0615

3 + 6 Primaries out of sheath. Many locks, most flank, few head + neck feathers out. Feathers of humerus, secondary coverts out.

Unmarked - 16.4 gm. Prim. 14 mm.

2nd + 9th Primaries out, 2nd barely. In all, fewer feathers out than in other birds. Defecated in my hand before weighing.

Marked bird gaped when I replaced unmarked bird.

Side Grounds + Bldgs, Nest E

3 eggs today. No ♀ incubating while I was there - probably incomplete clutch.

Barrow Lane, opp. S end Adm Bldg

Quiet here when I arrived, but soon a bird sang toward Bancroft, then flew from that way to a small tree, sang a few times, went into lower bushes, then disappeared. I searched but could find ~~nothing~~ nothing. However I find a singing bird opp. here in part of Adm. Bldg.

36hs
1957

Zonotrichia l. nuttalli

23.

6 April

Bancroft along 9th Field ^{Lower} Sec. Nest C
Still 5 eggs, warm.

Same, Lower Sec., Farther down

Find what I think is a nest in *Cotoneaster* by looking from below, but cannot get to it. At W end of 9th. Field a bird singing from wall + from *Arbutus*. Absolutely no luck nest finding. Finally got to presumed nest, it is remains of an old nest.

Inside NW Corner Edwards Field

Finally found the nest of this pair. It will be Nest G. It is in the bushes I thought, but is not on top of wall. I sat very tight. Nest has 4 eggs.

Greenhouse, Nest PB

Wt. 16.8 gm.

Prim. 11 mm.

One right secondary covert out. A few back + flank feathers out, most ventral feathers out. Defecated on scales - new mt. 16.5
Tumbled off balance pan 3 times, Sat on knees + in pin box.

SE Corner Univ. + Fulton, Nest F

Marked Prim. 16 mm. Wt. 19.5 gm. 1805 hrs.

Alula out, all but 9, 8, 7, primaries out on rt. wing, all but 9 on left wing. Rectrices just broken thru. Some primaries barely a new hit out. A few crown feathers coming out. Opened + closed bill rapidly but not for much in my hand. A slight flick on closing. Defecated on balance. New mt. 19.3
Unmarked. - Prim. 17 mm. Wt. 19.4 gm.

Gaped when I first reached into nest + again, hugely, when I replaced the bird to get

6 April

SE Corner Univ + Fulton, Nest F

this one. All but rt. 7 + 6 primaries, left 1st, are out. Rectrices thin, + most back feathers, but not far + down still on. Humerus feathers farthest out. Gave protest note + defecated in my hand as I put him on balance.

Marked bird gaped as I put ~~on~~ the other one back.
 @ 18 30 hrs.

7 April

Greenhouse area, Nest B

0600, wt 15.6 gm, Prim. 18 mm.

This bird found dead in nest. It was very windy last night, very cool if not downright cold. This bird probably did not have enough feather cover to keep warm. I will preserve him for further study.

Cat. # 175. See catalog.

SE Corner Univ. + Fulton, Nest F

0615 } Marked - wt. 18.0 Prim. 18 mm.

All primaries are out of sheath. Feathers on back of head are out, on forehead not. All others out, except central rectrices the sheaths are barely out. But even on these the ends are broken. Gaped in my hand.

Unmarked - wt. 17.1 gm Prim. 18 mm.

Gaped when I first reached into nest, again when I reached for him. Also at this time gave begging squeak, then gave protest note when I touched him. All feathers but on front of head + primary coverts have come thru sheaths.

3 birds
1957

Zonotrichia l. nuttalli

25.

7 April.

S. E. Lower House + Fulton, West F.

Marked 20.4 gm, Prim. 22 mm out 4, mm.

Crown feathers still in sheaths. Gave protest note when removed from balance. Defecated after weighing. New wt. 20.1

Unmarked, 22.0 gm, Prim. 21 mm out 2-3 mm.

Some forehead (as above) feathers still in sheaths.

Defecated on balance, New wt. 21.3 gm.

Gave several protest notes when handled on balance. Off balance, sat on whole tarsus.

8 April

0615 Unmarked. 19.7 gm, Prim. 25 mm out 2-5,

All feathers out except those above + in part of eyes. Streakings very plain on throat, breast + flanks. Stripe becoming evident on back of crown.

Banded 24/180303 on right leg.

Defecated before weighing.

Marked. 18.5 gm, Prim. 23, out 3-5 mm.

Very few forehead feathers not out.

Stripe on head very evident.

Banded 24/180304 on left leg.

Both birds jumped off balance pan repeatedly, Unmarked more than marked.

Unmarked bird was sitting on edge of nest when I left. I had to restrain him from leaving when I replaced him.

S. Side Grounds + Bldg. West E.

4 eggs now at 0700. ♀ was not on nest when I was there. This nest is 48" from ground at top, is lined with aluminum or tin foil.

Banks
1957

Zonotrichia leucostriata

26,

8 April.

Inside NW Corner Edwards Field, Nest G.

Still 4 eggs. ♀ still incubating. Flushed a ♂ ~~Brewer's~~ Blackbird from this tangle of vines. It was about 3 ft. from nest G, but ♀ White Crown was apparently not alarmed. She didn't fly until I was right there in bushes.

9 April

Bancroft along 4th. Field Nest C

No change at 0600. Still 5 eggs.

SE corner Fulton + Univ. Nest F

These birds not in nest today at 0645. Probably left yesterday sometime.

Inside NW Corner Edwards Field, Nest G.

No change.

Si Side Grounds + Bloops Nest E.

No change. I think ♀ was on nest, but am not sure. Very quiet if there.

10 April

Bancroft along 4th. Field Nest C

No change. Still incubating.

Inside NW Corner Edwards Field, Nest G.

No change. Not on nest yesterday or today, but saw 1 bird close by.

at 1430, No change, no bird on nest, but eggs feel slightly warm.

Bancroft along 4th. Field Nest C

No change a little after 1830.

11 April

No change at 0600 today.

Inside NW Corner Edwards Field, Nest G

No change, 0730. ♀ slid off nest quietly while I was still some distance away. Eggs warm.

11 Apr.

S. Side Grounds + Bldgs, Nest E

No change, 0700. Incubating 4 eggs.

Barrow Lane, S End Adm Bldg.

Saw 1 or 2 birds here. No singing. Thought one bird was gathering nesting material at end of small hedge, but not sure it was a white crown. A bird flew into small live oak tree from South.

12 April

Inside NK Corner Edwards Field, Nest G

No change at 0800.

Barcroft along ath. Field, Nest C

No change. Still incubating. I am afraid these eggs won't hatch; it's been too long.

Inside NK Corner Edwards Field, Nest G

R-4 2.7 gm. youngest (?)

R-3 2.5 gm. oldest - down dry.

R-1 2.3 gm. next oldest (?)

At 1630, felt in nest and thought there was one young. At ~~1630~~ 1815 returned with balance, found 3 young. On R-4 + R-1, the down was not yet dry, but matted and wet. R-3 had the down dried + fluffy. All begged, heard no sound. Could not hold heads up, nor right themselves.

This nest is very high, and is protected from above by a large branch, so is very hard to look into.

13 April

R-4 2.7 gm

R-3 2.7 gm

R-1 2.4 gm.

Egg is hatching. wt. 2.8 gm.

0615 hrs.

1/2
ayr

13 Apr.

Inside NW corner Edwards Field, Nest G

- R-3. Down fluffy, on head, humerus, radius, back, flanks. Skin ~~yellow~~ yellowish, was very pink yesterday. Gaped.
- R-1 Down dry & fluffy, not as leamy as on R-3. Seems to be less on back.
- R-4 Fell onto back, could not right self. Gaped even from that position.
- All birds gaped at the slightest provocation. If they were on balance pan and it moved, they gaped. Also when I held up mirror or my hand to nest. Looks like a tactile stimulus, due to movement.

~~Bancroft~~Bancroft along Ath. Field, Center Sec.

at extreme upper part of Sec., by gate, in cotoneaster, found a nest with 4 eggs. Call it Nest H, ♀ is incubating. Am reasonably sure this is the second nest of the pair that had Nest A.

Same Lower Sec., Nest C

No change around 0700.

SE. corner Univ + Fulton

Area of Nest E. Both adults upset when I was in area. Finally heard a fluttering in bush that indicates a young one.

Greenhouse Area, Rear of House Ec

Found nest with 2 eggs, Nest I. It is probably second nest of pair that lost Nest B. The nest is in a trough of potted plants outside a greenhouse. It is at the base of the highest of these plants, a small tree. Marked eggs 1 & 2, but don't know which is first.

30th
(1957)

Zonotrichia l. nuttallii

29.

13 Apr.

Inside NW Corner Edwards Field, Nest G.

1745-1800

R-4 4.2 gm. No gaping,

R-3 4.2 gm. Gaped.

R-1 3.8 gm. Gaped.

Plain 2.1 gm. Gaped. Down not dry.

Plain bird was still in part of shell. I took him out, he is very weak, may not last.

Collected him as an example of age 0.

14 April.

Greenhouse Area, Nest I

Three eggs at 0600, marked the third "3".
Other numbers not showing up too well.
I was on nest.

NW Corner Edwards Field, Nest G.

0610-06

R-3 4.4 gm. Dark patches
show under skin along back from
crown to anus, also on wings.

R-4 4.4 gm. Same as above.

R-1 4.0 gm. As above, but not
quite as plain a back streak.

All birds gaped, but none could hold
itself erect.

Bancroft along at H Field, Center Sec, Nest H

No change. Incubating 4 eggs.

Same lower Sec, Nest C.

still 5 eggs, warm. I accidentally
broke 1 egg, cracked it with a knuckle.
Replaced it in nest.

Banks
1957

Zonotrichia l. nuttalli

30

14 April.

Nest 6, 1800.

R-3 6.1 gm. Held ~~its~~ head up + begged for long time - 30 sec. Balanced on tarsi + back (ventral part) of abdomen. Gaped very determinedly, esp. when touched. Dark spots that will be feathers are very evident, inc. a few now on ant. part of ventral tract, where 2 lateral tracts join. Faint noises when begging.

R-4 6.0 gm. Feather spotting (see above) not quite as definite. This bird also gaped, sitting only on ventral part of body. No sound heard.

R-1, 5.6 gm. Same remarks apply as about R-3, except spots for feathers not as definite under throat. No sounds but active gaping.

15 April

0600

R-1 5.6 gm. Spotting that will be feathers very plain now on crown, ^{mid line of} back, humerus + rest of wing, just above ankles, thighs, and some less evident on ant. part of ventral tract.

R-3 6.3 gm. Same remarks as above, with perhaps even darker spots.

R-4 6.1 gm. Same as R-1.

These birds are all at precisely the same stage, judging from appearance. All gaped; all had trouble staying right side up; tended to fall on back or sides.

ank
1957

Zonotrichia leucostriata

31.

15 April

Bancroft along Ath Field, Nest C.

At 0600 found 4 young and 1 egg in nest.

Believe they hatched this A.M. Weighed 0630-0645

R-1 2.6 gm. Down on back apparently not all dry. Mouth lining not very red. Skin pinkish on back, getting yellower.

R-3 2.4 gm. Down not dry.

L-1 2.45 gm. Down not completely dry.

L-3 2.3 gm. Down all dry, not matted.

Marked birds as above; the other egg is not pipped, but is heavy, apparently good. One bird, R-3, is very new, its down all matted, obviously just hatched.

R-1 and L-1 have the down almost dry, but

matted a couple places. L-3 has the down

* { completely dry. Believe: L-3, possibly R-1 + L-1 hatched last night, R-3 this morning. May be wrong on R-1 + L-1,

Nest C Athletic Field

1815 R-1 8.0 gm. Primaries extruded, and most secondaries, but not measurable.

Skin broken only on about last half (4-9) of the primaries.

R-3 7.5 gm. Same as above, but fewer primaries out of skin, 6-9, and secondaries just beginning to push. Faint squeak and click heard when gaping.

R-4 8.7 gm. Same as R-1.

Nest C Bancroft + Ath Field, Lower Sec.

R-3 3.7 gm. Down still somewhat matted.

R-1 3.7 gm. Down dry.

L-1 2.8 gm. Down slightly matted

L-3 3.3 gm. Down dry.

Still 1 egg. All birds gaped. The

Banks
1957

Zonotrichia l. nuttalli

32

15 April

Bancroft along with Field Lower Sec Nest C
hand region of all showed a dark streak,
the only place where something means the
pinkish ^{yellowish} ~~pinkish~~ of skin. Movement, either of
the nest + bushes, the balance, or my hand tends
to make them gape. They will gape
sometimes if touched on back. Cannot
hold heads up for very long.

16 April

Inside N. Klammer Ed. Field, Nest G.

0615 R-3 7.7 gm. Prim. 6-9 out 1 mm., others
barely thru skin. ~~No others out.~~ Secondaries
also barely thru. No others out. Gaped
and squeaked faintly while gaping.

R-4 8.2 gm. Biggest prim. not quite
1 mm. Eyes open. Not open in R-3.

R-1 7.9 gm. Biggest Prim. $\frac{1}{2}$ mm.
Eyes not open. All secondaries not
yet bulged thru skin. Held to nest
lining, pulled some out.

Bancroft along with Field Nest C.

0630 R-1 3.9 gm. Dark streak along ^{hand} forearm,
down back, on humerus, on crown.

R-3 3.8 gm. Not as dark as R-1, but
showing in same places.

L-3 3.4 gm. Not as dark even as
R-3 is, but just an indication.

L-1 2.6 gm. Dead, for some time.

Ants were in nest on L-1, which had been
dead for a good while, evidently, and was
beginning to rot, esp. around eyes.

Smith
1957

Zonotrichia l. nuttallii

33

17 April

Inside NW Corner Edwards Field, Nest 6.

- 0615 R-4 10.2 gm. Primaries all out 2 mm. Secondaries out varying lengths, outermost + inner least, in steady grade. Chirped to nest lining, did not yape.
- R-3 10.2 gm. Staped + squeaked on balance. Primaries 2 mm +, secondaries all about same, less than primaries. Humeral + back tracts out on both birds.
- R-1 9.6 gm. Primaries almost 2 mm. Secondaries varying lengths. Birds did not yape as much as usual, were crouched when I first reached to nest.

Bancroft along Ath. Field ~~Center~~ Nest C

AM
0630+

- L-3 4.7 gm. Dark feather streaks over body show well thru skin
- R-1 5.1 gm. Vito, Active & yaped.
- R-3 5.2 gm. Vito, primaries about to bud thru skin.
- All these birds in nest prop their heads upon the one remaining egg.

Bancroft, Center Sec., Nest J.

- 0645 Found this nest with 3 young: Marked & weighed.
- R-3 9.4 gm. Defecated, new Wt. 9.1 gm. Prim. out of skin 1 mm. } eyes not open.
- L-3 10.3 gm. Prim 3 mm. } eyes not open.
- Secondaries varying lengths.
- R-1 3.8 gm. Feather tracts show well; primaries show bumps on skin, not quite ready to break through.
- 3 young (2 ages) + 1 egg in this nest. About 5' high, in clump of bushes.

3aubs
1957

Zonotrichia l. nuttallii

34

17 April

Barrow Lane, opp S. and Adm. Bldg.

Heard and saw a bird here again, but didn't look for nest. Soon the same (?) bird was singing on W side of storeroom. Here I found the remains of 6 old bird nests in a line of trees, but found no new nests.

S. side Grounds + Bldgs. Nest E.

♀ Incubating, only 3 eggs.

Inside NW Corner Edwards Field, Nest G.

1745 R-1 10.8 gm. Prim. 3 mm.

Secondaries 2-3 Eyes open. All feather tracts well thru skin, shinned + crunched in my hand. Head tract barely out.

R-3 12.9 gm. Prim. all close to 5 mm. Head feathers barely thru, others all out.

R-4 12.3 gm. Prim. 3-4 mm. Eyes open. Action + feather development

similar on all - crunched + shinned, little or no gaping. Very nicely + chilly.

Nest C 1800 hrs.

R-1 6.9 gm. Primaries just bumps thru skin. Very active gaping. Holds head up straight between gapes. No movement or sound stimulates gaping.

L-3 6.4 gm. Primaries barely thru.

R-3 6.4 gm. "

All three birds gaped whenever I reached into nest, and really stretched up. All very similar in action + development, but R-1 seems a little ahead on wings. Began to rain while I was here.

Whe
1957

Zonotrichia l. nuttallii

35

18 April

Inside Edwards Field, Nest G.

0615 R-3 12.4 gm. Prim. 6 mm.

Humeral + flank tracts show light ^{tips} ~~sheaths~~,
about to break sheaths. Gaped,
extended tongue while mouth open.

R-4 11.5 gm. Prim. 5 mm, 6th longest.

No light tips on any feather sheaths.

R-1 9.8 gm. Prim. 4. Rest of
remains same as R-4. Bird is cold,
Birds crouched in my hand, with head
on my palm; did not sit erect.

Bancroft, Lower Sec., Nest C

0640 All three birds dead. Birds are
warm - were they being brooded?

See catalog for weights.

Bancroft, Center Sec., Nest J

0645 L-3 13.1 gm. Prim. 7 mm. Some few
sheaths of humeral tract light tipped.

R-1 5.9 gm. Prim. barely budging
thru skin.

R-3 12.1 gm. Prim. 3 mm. This
bird very stiff, not active.

L-3 + R-3 have eyes open.

Inside Edwards Field, Nest G.

1745
- 1800 R-3 14.8 gm. Prim. 8 mm. Sat very
quiet in my hand, with neck + head down.

A few feathers on abdomen have broken thru,
and secondaries + sec. coverts are about to. A
few humeral feathers also out, + some on flanks.
Back + ^{crown} ~~neck~~ show light tipped sheaths.

R-4 14.2 gm. Prim. 6 mm.

Defecated, ~~now~~ wt. 13.8 gm. A few
feathers on abdomen, + very few on humerus are
thru sheaths. Back + a few crown ~~for~~ sheaths

Banks
1957

Zonotrichia l. nuttallii

36

18 April, 1957.

Inside Edwards Field, Nest 6
show light tips. This bird is gaping, + is very active,
in contrast to one previous.

R-1 12.6 gm., after defecation 12.3 gm.

Prim. 5-6 mm. No feathers thru, and
only a few on back show light tips.

All 3 birds cling tightly to nest on removal.

Bancroft, Nest J

1800-1815 R-3 15.0 gm. Prim. 5 mm.

No feathers thru sheaths, none showing
light tips. Very active, squeaking +
gaping.

L-3 16.2 gm. Prim. 9 mm

Cling very hard to nest. Extremely active
in my hand. Quite a no. of abdominal
feathers out, and some on humerus.
Later crouched in my hand with neck
pulled in, but head down.

R-1 7.0 gm.

Eyes not open. Primaries barely thru skin,
perhaps .5 mm. Fairly active, but laid on
sideline balance, evidently couldn't sit up.
Very far behind others.

♀ of this pair has an aluminium band
on left ^(?) leg. ♂ has much stronger, deeper
voice, louder, slower chirp.

19 April

0600

L-3 14.6 gm. Prim. 11 mm

Several back feathers out in addition
to those out yesterday.

R-3 14.5 gm Prim. 7 mm

No feathers thru yet. Defecated, 14.2 gm.

R-1 6.4 gm. Prim. 1 mm.

Gaped a lot.

19 April

Inside Edwards Field, Nest 6

R-3 (13.7 gm. Prim. 10 mm.

All ventral feathers thru sheets except a very few most posterior. Many back feathers out, all humeral, a few on back of crown + back of neck. Prim. 2+3 on right, several prim. coverts + lesser sec. coverts on both wings out, 3 secondaries on rt. out, 1 on left. Wt. after defecation 13.5.

R-1 12.0 gm. Prim. 7 mm.

A very few humeral + abdominal feathers out. Gave fright note when taken from nest.

R-4 13.2 gm. Prim. 8-9 mm.

A few humeral, back, flank, + upper abdominal tract feathers out. One prim. covert + 1 sec. covert on left wing. Defecated before weighing.

Greenhouse Area, Nest I.

This nest has 4 eggs, and the bird is incubating.

S. Side Grounds + Bldgs, Nest E

0800 This nest is empty today, but otherwise undisturbed.

Inside Edwards Field, Nest G.

1800 R-3 17.3 gm. Prim. 13 mm.

All abdominal, flank + humeral feathers out. Most back, a few posterior crown, + some thigh feathers out. Rt. Prim. 1, 2, 3 out, as are inner secondaries + outer sec. coverts, also a few ~~primary~~ coverts. No left primaries out, but a few coverts are. Defecated - new wt 16.9.

Sanche
1957

Zonotrichia l. nuttallii

38.

19 April

Inside Edwards Field Nest G.

R-1 13.2 gm. Prim 8-9 mm.

Abdominal feathers slightly out, as are a few back, humeral, + covert + flank feathers. Defecated before weighing.

R-4 15.6 gm. Wt. after defecation 15.0

Prim. 11 mm, none thru. Humeral, back, flank, abdominal are mostly out, and a few on crown are barely broken. A few coverts are out.

Bancroft, Center Sec. Nest J

1815

R-1 8.9 gm. Prim. 2 mm.

Gaped, very active, fell off balance twice. All feather tracts showing up well.

R-3 18.1 gm. Prim. 9 mm.

Most abdominal + flank feathers slightly out, a couple humeral, no wing or back. Gaped in my hand, + when I reached into nest.

L-3 18.1 gm. Prim. 13 mm.

All ^{higher up} ~~back~~ flank + abdominal, most back, feathers out of sheaths. A few coverts on each wing out.

The bird with the band on the left leg is the more active, louder, of the two, the one I thought may be the ♂ yesterday by sounds. Also, a check of banding gives a left banded bird, W-2, probably a ♂.

~~20 Apr~~

Bancroft along 4th Field, Nest H

No change.

20 April

Haste St., Berkeley

Heard white crown sing at 0510.

3 weeks
1957

Zonotrichia l. mitchelli

39.

20 April

Bancroft, Nest J.

0600 R-1 8.1 gm. Prim. 4 mm.

No feathers thru

R-3 16.6 gm. Prim. 12 mm.

A few back feathers out of sheaths, several coverts, prim + sec., out. Not very much change from last evening.

L-3 17.5 gm. Prim 15 mm.

Rt Prim 2, 3, 4, 5, 6, 8 are out of sheaths.

Lft, Prim 1, 7 out, 7 farthest of all.

Most secondary coverts out. A few

crown feathers are thru. All back, flank, thigh, + abdominal feathers out.

Sits on ankle + rump.

R-3 + L-3 cling to nest on removal.

Inside Edwards Field, Nest G

0615 R-3 15.5 gm. Prim. 15 mm.

all Prim on rt, 3-4-5 on left are out.

R-4 15.3 gm. Prim. 12 mm.

Rt. 1st Prim. out, none on left.

R-1 12.4 gm. Prim. 10

Left 3 + 4 Prim out, very few other wing feathers.

1800. R-1 14.8 gm. Prim. 13 mm.

Feathers out in middle of back, flank, abdomen + humerus, a few on back of head. Rt 5th, left 2, 3, 4 Primaries out. Several secondaries + sec. coverts.

Wt. after defecation 14.6 gm.

Sat on belly + ankles. No grasping of my hands.

R-3 14.8 gm. Prim. 17 mm.

Gave protest notes which really alarmed adults. Many feathers on head.

Banks
1957

Zonotrichia l. nuttalli

40.

20 April

Inside Edwards Field, Vest Co

all back ~~for~~ flank + abdomen out. Left 1, 3, 4, 5, 7 + 9 Primaries, all ~~rt.~~ primaries out.

All other wing feathers but ~~prim~~ coverts out. Sits on ^(belly) rump + ankles + toes. Grasped my fingers, + nest.

R-4 17.6 gm. Prim. 15 mm.

Right 1, 3, + 6 Prim. out; all left ^{ones} out.

Rectrices seem to have grown suddenly, are 1-3 mm, still in sheath. Many

head feathers out, not as many as R-3.

wt. after defecation 17.3 gm.

Sits same as others. Gave protest notes after second weighing.

1825 Bancroft, Vest Co J

Heard birds begging as I went in under bushes.

R-1 9.7 gm. Primaries out 4 mm.

Very active on balance; threw himself over backwards begging. All feather tracts very well defined. Sits on abdomen,

ankles, + chin, often falls backward. This little bird always seems to be on top in the nest.

R-3 20.3 gm. Prim. 14 mm.

Clung tightly to nest. Gaped at first in my hand, then crouched in typical position - neck drawn in, head down, wings forward + down. Left second primary barely out. No head + back-of-neck feathers out.

L-3 20.1 gm. Prim. 17 mm.

Gaped in my hand; then crouched head down, same position as R-3.

Banks
1957

Zenaidura macroura

41.

20 April

Along Bancroft, West J.

A few feathers on back of head are out,
all primaries out, some 2-3 mm. Most
primary coverts out. Sits on belly, able,
+ feet, but can almost stand up.

21 April

Haste St. Berkeley

Heard White crown at 0500. Light then.

Inside Edwards Field, West G.

0550

R-3 13.4 gm. Prim. 18-20 mm.

All primaries except left 8th are out.

Outer rectrices breaking thru, outer 2 pair.
Most prim. coverts out.

R-4 16.7 gm. Prim. 16-17 mm.

All primaries, most prim. coverts out.

Gave protest notes. Most rectrices almost
broken thru.

R-1 13.7 gm. Prim. 15 mm.

Gave protest notes in nest. Got off
balance pan. Rt prim 2, 4, 5, 6, 7, 8 are
out, left all are out. Good many head
feathers out, rectrices in process.

0610

Bancroft, West J

R-1 9.2 gm. Prim. 6 mm.

Back + humeral feathers showing light tips.

A few posterior abdominal feathers barely
out.

L-3 18.6 gm. Prim. 20 mm.

Left 9th primary ^{only} not out. Most head feathers
out, but stripe not showing yet. Jumped
off my hand. Still doesn't stand on feet.
Defecated before weighing.

Bahr
1957

Zonotrichia l. nuttalli

42

21 April

Bancroft, Nest J

R-3 18.7 gm. Prim. 17 mm.

Left 2, 4, 5, 6, 8 Primaries out, none on rt.

Few primary coverts out.

Stuck my finger thru the remaining egg; it popped a loud explosion. Very little fluid in it.

1745 L-3, 20.2 gm, Prim. 23 mm.

Most head feathers out, but stripe not showing - small. Primary coverts almost cover remains of primary sheaths. Back well feathered, ventral surface nearly covered. All but central rectrices out.

Jumped off balance 3 times, & out of my hand, crouched in corner of box.

R-1 3.8 gm, Prim. 8 mm.

Large no. of ventral feathers out, but not far.

R-3, 21.5 gm, Prim. 19 mm.

Defecated prior to weighing, jumped off balance and hid in corner of box.

Rt 4 + 9 Prim not out, left 1st + 7 + 4.

Jumped out of my hand twice.

Bancroft, Nest H

at 1745, 2 young + 2 eggs. Weighed at 1800.

R-1 3.5 + gm, Down not completely dry on wings.

R-4 3.1 gm, Down incompletely dry on wings + mid-back.

Both birds assume position w/ head bent under body R. But then from very ungainly position, stretch neck up with great show of strength to gape.

amb
1957

Zonotrichia l. nuttallii

43

21 April

Inside Edwards Field, Nest A

1815 R-1 14.5 gm, Prim. 17 mm,
all primaries + all coverts except 2 on left wing
are out. Head not well feathered. Rectrices
out except center pair.

R-4 17.5 Prim. 19 mm,

Sits on feet only, sometimes rests on ankle.
Back half of head well feathered. Rectrices out
except central pair. Abdom. nearly covered,
more so in center than front or rear,
jumped from my hand into bushes on way
back to nest, but I got it back into nest.
Squeaked when jumped, aroused parents.

R-3 15.2 gm. Prim. 21

Rear half of head fairly well feathered, all
primaries + coverts out. Rectrices out except
central ones, + they barely thru. Striping
beginning to show on throat.

22 April

Bancroft, Nest H

0550 R-1 3.5 gm. Down still a little matted on
humers + back.

R-4 3.1 gm. Ditto, even more.

L-1 2.4 - gm. Down seems as dry as on
older birds, but is a little matted.

The other egg is not pipped.

Bancroft, Nest D

0605 R-1 11.0 gm. Prim. 11 mm.

Several back feathers have come thru,
as well as a large no. of abdomen feathers.
No wing feathers out, but a few on flank.
Wt. after defecation, 10.7 gm.

Smith
1957

Zonotrichia l. nuttallii

44

22 April

Bancroft, Nest J

R-3 19.5 gm, Prim. 21
Crown stripe shows pretty well, all
primaries + coverts out, coverts not far.
Banded # ~~1308~~²⁴⁻ 180308 on rt. leg, black
band on left.

L-3 18.0 gm, Prim.
Crown stripe evident, Prim. coverts
almost over primary sheaths, Banded
24- 180309 on left leg, black band on rt.
Put R-1 back in nest, but left R-3 + L-3 out,
on ground together. As I took one of them
from nest, it gave loud protest notes + clutched
nest. Parents came very close, and chirped
excitedly, and other bird jumped out. Both
jumped off balance + out of my hand
repeatedly. Spotting ~~seen~~ showing some.
Inside Edwards Field, Nest G

0630

R-4 Crown stripe beginning to show well.
All primaries well out, sheaths almost
covered by prim. coverts, Anterior part
of head still in sheath.

17.1 gm, Prim.

Banded # 24- 180310 on right leg, white
band on left leg.

- R-1 14.1 Condition same as R-4,
primaries not as well covered by coverts.
24-180311 left leg, white band rt. leg.

R-3 14.3 gm, Prim. 22 mm.

Head stripe shows very well, but
anterior most feathers of it not developed.
Collected. Catalog no. 183.

Greenhouse Area, Nest I

No change. Chased & off 4 eggs.

Bals
1957

Zonotrichia l. nuttallii

45.

22 April

Barrow Lane, Opp. Adm. Bldg.

0800

Found nest with 4 eggs in cantharus. Nest K.

Bancroft, Nest H

at 1300 hrs., 3 young + 1 egg.

1810 hrs. L-1 3.2 gm. Hand shows dark streak, not definitive.

R-4 4.7 gm.

R-1 5.3 gm. Hand area shows dark, Dark spots show on back + humerus.

23 April

Bancroft, Nest J

0555 R-1. 11.1 gm. Prim. 13 mm.

Many humeral back, back-of-crown, flank, thigh, + abdominal feathers well out.

Left 8th primary barely out. Only 1 or 2 coverts out. Very quiet.

Bancroft, Nest H

0605 - 0615 R-4 4.8 + gm. Spots showing on back + humerus, stripe on hand.

L-1 3.6 gm. Same as above.

R-1 5.5 gm. Same, perhaps more developed. Spots extend to tail.

Barrow Lane, Nest K

Only 3 eggs at 0645 today.

Must be mistake - 4 eggs at 1750 hrs.

Bancroft, Nest H

1800 R-1 7.7 gm. Primaries show as buds extending from skin. Flank + abdominal tract light colored but discernable. Humeral, head + back show many dots.

R-4 6.6 gm. Looks exactly like R-1.

L-1 5.0 gm. Primary buds not as far out, flank tract less clear. all gaped

3/25
1957

Zonotrichia l. nuttallii

46

23 April

Bancroft, Nest U

1815, Nest is destroyed, No sign of the last baby, but parent birds much alarmed.

24 April

Bancroft, Nest H

0555 R-4 6.8 gm. Primaries out, 9-1st 1 mm, grading to 5th barely out. Secondaries bulging skin. Thigh tract showing as faint dots, L-1 4.9 gm. Primaries 9-5 out, but not much. Others just bulging skin, thigh feathers show as a few dots. Abdominal tract dark in throat area.

R-1 7.8 gm. Eyes slightly open. Ventral tract dark in throat area, to mid-body. Primaries as in R-4, Back + humerus very dark, about ready to come thru. Defecated, new int. 7.6 gm. An adult bird was at or on nest; likewise last mte.

Barrow, Nest K

No change 0600

Greenhouse Area, Nest I.

No change 0645.

Corner Univ + Fulton, NE Corner

at least 1 banded young in company with ad ♀. ♂ singing in tree above.

Presumed nothing from nest F. Banded on right leg.

Bancroft, Nest H

1805
-1815

R-4 9.1 gm. Outer secondaries thru just, inner ones still bumps under skin. All feather areas show dark except tail feathers. 8th prim 1 mm. alula out.

2nd
1957

Zonotrichia l. nathallii

47

24 April

Bancroft, Nest H

L-1 7.2 gm.

8th Prim, less than 1 mm.

All primaries + first few secondaries out.
Alula not out. All tracts show well.

R-1 11.5 gm.

8th Prim, over 1 mm.

Most secondaries out, all tracts nearly ready to come out.

Greenhouse Area, Nest I

No change at 1840. ♀ not on nest, eggs warm.

25 April.

Bancroft, Nest H

0550 R-4 8.8 gm.

8th prim, 2 mm +

All secondaries thin.

R-1 10.3 gm.

8th Prim, 2.5 mm.

All secondaries thin.

L-1 7.1 gm.

8th prim, 1 mm +.

All primaries out of skin, only 1st (outer) 4 or 5 secondaries. Alula out. All tracts show well except tail.

Barrow Lane, Nest K

No change at 0600.

Greenhouse Area, Nest I

No change at 0700. Nor at 1800.

Bancroft, Nest H

1820

R-4 10.8 gm.

Prim. (8th) 3 mm. All flight feathers thru skin. Humeral + back feathers thru skin. Flank + abd. feathers out barely.

R-1 12.5 gm.

8th Prim. 4 mm -.

feather tracts same as R-4, little more. Very few back feathers out.

L-1 9.3 gm.

8th Prim. 2 mm.

All primaries + secondaries out, no other feathers. Flank + abdominal almost.

Banks
1957

Zonotrichia l. nuttallii

48

26 April

Bancroft, Nest H.

L-1 9.0 gm. 8th Prim. 3 mm.

AM. All secondaries thru skin; some humeral, anterior abul. tract, also out.

R-4 10.2 gm. 8th Prim. 4 mm.

All secondaries; most all humeral; all but anterior most flank; all but posterior most ventral tract; large number of back + back-of-neck feathers out of skin.

R-1 11.7 gm. 8th Prim. 4 mm +.

Eyes open. Feathering same as R-4.

Barrow Lane, Nest K

No change at 0700

Greenhouse Area, Nest I

No change at 0700

End Forestry Bldg.

at 0710 there is a bird singing from the live oak at this end of bldg. I see no other birds. He is doing nothing but singing.

Inside NW corner Edward Field

In the area of Nest G. The pair of birds was here, but no sign of the young ones. The adults were not carrying food, and may be in the early stages of re-nesting.

Bancroft, Nest H

1810 L-1 12.2 gm. 8th Prim. 4 mm.

All flight feathers (no tail), flank, most humeral, most mid- + upper-back feathers out. Abula out. Does not open eyes, but I think he will.

R-1 15.4 gm. 8th Prim. 6 mm.

Most feathers out on all tracts, upper thigh with least. Front of head w/ none. Eyes open.

200hs
1957

Zonotrichia l. nuttallii

49

26 April
Barcroft, Nest H

R-4 12.8 gm.

8th Prim. 5.5 mm.

Gave faint squeaks in my hand. Feathers same as R-1, eyes not open.

All birds sit with head down & extended, rest on all ventral surface. All raised erect and gaped strongly when I first reached in or replaced one.

27 April

0555

R-4 14.5 gm. 8th Prim. 8 mm.

Eyes open. A few humeral and a good many ventral feathers out of sheaths. Both parts of ventral tract, appear more,

L-1 11.2 gm. 8th Prim. 5 mm.

Eyes apparently not quite open, at least not kept open. Eyes are open when

gazing. Some sheaths of all tracts thru skin, very few on thigh. Def. before weigh.

R-1 12.5 gm before defecation, 12.0 after. 8th Prim. 7 mm.

Very few humeral, good many ventral feathers out of sheaths.

Barrow Lane, Nest K

No change at 0615.

Barcroft, Nest H

1820

R-1 19.3 gm. 8th Prim. 10 mm.

Two outer secondary coverts each wing out of sheath. Most flank & abdominal feathers out. Most humeral & many mid-back also out. Rectrices sheaths out of skin 2 mm at most. Neck drawn in sometimes, extended sometimes.

R-1 & L-1 stretched, gaped, & squealed in nest.

3 birds
1957

Zonotrichia l. nuttalli

30

27 April

Bancroft, Nest G

L-1 14.5 gm.

8th Prim. 6 mm.

Gapeed gave begging notes in my hand.

Sits w/ neck partly extended. A couple abdominal feathers thru sheath, but barely, and no others. Tail sheaths not thru skin,

R-4. 16.7 gm.

8th Prim. 9 mm.

Gapeed for first time when I replaced L-1. Humeral, abdominal, flank, + mid-back all have many feathers out of sheath. Tail sheaths out about $\frac{1}{2}$ mm.

28 April

0710

L-1 14.2 gm.

8th Prim. 8 mm.

Most abdominal feathers out of sheath. ~~No others~~. A couple flank barely out.

R-1 17.9 gm.

8th Prim. 11 mm.

Rt. Prim 2 + 5 are out, many sec. coverts on this wing. Left Prim, 3, 4, 5, 6 are out, fewer sec. coverts, a few prim. coverts. One head feather. Some on all tracts out, except tail. Alula out. Tail 2 mm \pm . Defecated before weighing. Holds head up part of time.

R-4 15.2 gm.

8th Prim. 11 mm.

Defecated before weighing. Jumped off balance pan. 2 coverts left side, 1 rt. side are out. These are last (= outer) sec. coverts, same two to be out first on all birds. 1 crown feather. thigh, humeral, back, + abd. tract all mostly out. Sat always with chin resting on my hand.

Barnon Lane, Nest K.

No change in A.M.

28 April

Green house Area, Nest I

No change at a ~~AM~~ check. Have not seen parents here for a while.

2214 Haste St., Berkeley, Calif.

In my back yard found a nest in a hedge bush, 4 eggs. Call it nest "L".

Bancroft, Nest H

1910 L-1 16.3 gm. 8th Prim. 10.5 mm.

Several secondary coverts out, many back, humeral, flank, all abdominal, a few thigh feathers out. Tail 1.5 mm at most. Definitely clung to nest. Mapped + gave begging notes in my hand.

R-1 19.5 gm. 8th Prim. 13+ mm.

Clung to nest. All rt. prim. (but 2+9 out), all left prim + all but 2 left sec., about half right secondaries out. Several crown feathers out, upper tail coverts out, all other tracts well feathered. Tail 3 mm.

R-4 16.1 gm. 8th Prim. 13 mm.

Clung to nest, gave protest notes when I took him from nest. Rt. 9th Prim., all rt. sec., left 6th prim., all left sec. not out. Some upper tail coverts out. Most tracts well feathered, but not quite as well as R-1.

29 April

0630 L-1 15.5 gm. 8th Prim. 12 mm.

Rt. 3+9 Prim., out, 7+8 nearly so. Outer 2 rt. secondaries out. Left 2+4th Prim out, most others nearly so. Both alulae out. No tail, crown, or neck feathers out, few thigh. Otherwise most feathers out. New wt. after defecation 15.3 gm.

Banks
1957

Zonotrichia l. nuttalli

52.

29 April

Bancroft, Nest H

R-4 14.7 gm. 8th Prim. 15 mm.

All rt. prim but 9, all left prim., all left sec., a few rt. sec. out. Many head feathers, esp. on rear of head, out. Other tracts well feathered. Upper tail coverts out, Rectrices about 3½ mm.

R-1 18.3 gm. 8th Prim. 15 mm.

all primaries and secondaries out. Most coverts out. Many head feathers out.

Most rectrices broken thru.

Greenhouse Area, Nest I

No bird around nest, eggs ice cold.

Nest deserted for sure.

Corner Union + Fulton

No sign of either young or adult birds.
Main gate off campus

A pair of birds in hedge across wide area from policeman's hut. Became very excited as I probed in low bushes + hedge. One of the birds is singing.

Could not find nest - but there is one!

Bancroft, Nest H

1960

L-1 16.9 gm. 8th Prim. 15 mm.

4th rt. + 9th left primaries not out.

All secondaries out. 3^d left, 1st rt. prim. covert (greater) out. A few on back of head, very few on neck out. Upper tail coverts out. Tail (outer) 3 mm. Gaped + gave loud begging notes when replaced.

R-4 16.9 gm. 8th Prim. 17 mm.

All remiges out. Rt. 1, 5, 6, 7, left 1, 3, 4, 5 greater prim. coverts not out.

Rectrices out, outer measures 4 mm.

All tracts well feathered.

Banks
1957

Zonotrichia leucophrys

53

29 April

Bancroft, Nest H

R-1 20.9 gm. 8th Prim. 17 mm.
jumped off balance. All rectrices out.
1st rt. + 1st left greater prim coverts
only ones not out. All tracts well
feathered, crown stripe not yet well
evident. Sits w/ head up but drawn
in. Outer tail feather 5 mm +.
All birds sat same. Edge of nest is
fouled up excreta.

Banana Lane, Nest K

No change at 1900.

30 April

Bancroft, Nest H

0645 R-4 15.4 gm. 8th Prim. 18 mm.
Back + neck well feathered, show no sheaths.
Crown stripe shows well. Breast spotting
somewhat evident, but large bare spot on
chest. Outer rectrix 6 mm. Rt. greater
Prim. coverts 1, 5, 6, 7, left 1, 3, 5 are not
thru sheath. Most prim. only 2 mm out.

L-1 15.2 gm. 8th Prim. 16 mm.
Would not stay on balance - jumped off
repeatedly. Crown stripe not evident.
Not enough feathers free of sheath here. Back
+ neck well feathered, no sheaths show.

Rt. 1, 5, 7, 8 left 2, 3, 6, 7, 8 greater prim.
coverts out. Tail (outer) 4 mm. All
rectrices thru sheaths.

R-1 18.4 mm. 8th Prim. 19 mm.

Tail (outer) 6 mm. Crown stripe showing
some, no sheaths from mid-crown to tail.

First gr. prim. on each side not out.

Hard to replace in nest.

R-4, R-1 set on fingers
only.

Banks
1957

Zonotrichia l. nuttallii

34

30 April

Bancroft, Nest H

Collected all 3 birds at 1725. Weighed them
back at M42 at 1735.

R-1 21.7 gm. 8th Prim. 21 mm.

All wing feathers out so that no sheaths
are evident. Under tail coverts out.

Outer rectrix 9 mm. Crouches in
my hand with head down in. Sits
on entire tarsus, belly touching table.
Crown stripe shows well, back very
well feathered. Upper back dark brown,
wings dark, rest of body light, chest
large. Streaking evident on sides
and throat. Still a large area not
feather covered on abdomen, running
down center, largest posterior. #185

R-4 17.7 gm. 8th Prim. 21 mm.

All wing feathers out, but primary +
primary covert sheaths still evident.
Crown stripe evident. Under tail
coverts + anal feathers out. Outer

rectrix 7 mm. Back darker than
R-1. Sits same way, but not as quietly.
This bird is #186

L-1 19.3 gm. 8th Prim. 18 mm.

Crown stripe evident but many sheaths
still present. Wing sheaths still evident.
Left inner + rt. outer greater primary
covert not broken sheath yet. No
under tail coverts out, but upper +
rectrices are. Tail (outer) 5 mm.
#187.

Killed all birds 2000. Cataloged as above.

30 April

Barrow Lane, West K.

♀ left nest again as I checked in evening. 1915

1 May

Barrow Lane, West K.

0715. All four young are hatched.

R-1 2.4 gm. Gaped in nest + hand.

Down dry, very little matted.

R-3 2.5 gm. Down not quite as dry.

Very still, appears barely alive.

L-1 ~~2.4 gm.~~ 2.2 gm.

L-3 2.4 gm.

L-1 apparently youngest, Down very wet, but may be from rain.

1915 R-1 3.5 gm. Others gaped when I looked at nest, but not this one. Gaped in my hand when I moved balance. Laid still in my hand until I moved.

L-1 3.3 gm. Gaped when wind moved balance. Faint dark streak along hand.

R-3 3.5 Same.

L-3 3.5 Same.

Rather windy, hard to get good weights on birds, esp. last one. All have dark spots down back, from neck to tail, all gaped when moved. A blood vessel running up right side of neck is prominent on all, has been on all young birds so far.

Back spots less distinct on L-1

2 May

L-3 3.5 gm.

R-1 3.4 gm.

L-1 3.2 gm.

R-3 3.3 gm.

Zanka
1957

Zonotrichia l. nuttallii

56

2 May

Barrow Lane, Nest K

1950. L-1 4.9 gm.

L-3 5.3 gm.

R-3 5.2 gm.

R-1 5.4 gm.

} all gaped. all
show dark on
humeral tract, a
couple spots on "flank"

Barrow Lane, opp. N. end Adm. Bldg.

Flushed bird out of clump of *Ceanothus*,
could not find nest.

3 May

Barrow Lane, Nest K

0625 L-1 4.8 gm. Primary "bumps" barely
discernable, where feathers will be. A
few dark spots on thigh.

L-3 5.3 gm. Wing bumps more
prominent, also indicate secondaries.

R-3 5.2 gm. Same as L-3

R-1 5.1 + gm. "

2214 Haste St., Berkeley, Nest L

at 0600, No change. 4 eggs.

Barrow Lane opp. N. end Adm. Bldg.

Found nest with 4 eggs where 2 flushed
bird last night. Call it M.

Front (E) of Quinelle Hall, Campus

Heard + saw a pair here last evening late.
Today at 0720 hear a bird singing to S,
along stream. Saw one bird picking
at nest material near S.E. corner of bldg.

NE Corner Trach Field

A pair here in road between track + baseball fields.
One ♂, singing. Another trilling, as early in season.
Flushed one or both from *Rosaceae* along
road. Later they flew to *Geraniums* along Tennis
court.

10 10 10 10 10 10 10 10 10 10

10 10 10 10 10 10 10 10 10 10

3 May

 NE ~~1/2~~ ~~1/4~~ Lower Oxford + Carter

Dr. Miller reported birds here, told me last Mon. (29 Apr.) Today saw a pair with 2 flying young.

Main gate of Campus

A pair here with at least one flying young, still feeding it. It didn't fly as well as two mentioned just previously. Could not see any band - may or may not be from West F.

SE Lower Union + Fulton

A pair of birds in live oak here, apparently no young. I watched them closely for quite a while. Feeding + preening. May have second nest started.

Greenhouse Area

A bird singing in area of old nest B, and also toward I, around all greenhouses. Cannot find ♀ or nest. Found what I guess is nest B, with one egg, but ♂ was very excited there. That is also where he does most singing.

4 May

Barram Lake, West K

0620

L-3 7.9 gm.

 8⁺ Prim. 1 mm.

Eyes open just a slit. All Primaries then shut.

R-3 7.1 gm.

 8⁺ Prim. < 1 mm.

Eyes not quite open. All prim. then.

R-1 8.0+ gm.

 8⁺ Prim. mm.

Primaries out, eyes not open.

L-1 7.3 gm.

 8⁺ Prim. mm.

Prim. out, last (inner) 3 or 4 just barely out.

Eyes not open

4 May
Barrow Lane, Nest K

1850 R-1 11.4 gm. 8th Prim. 1.5 mm.
 L-1 10.6 gm. " < 1 mm.
 L-3 11.2 gm. " 1.5 mm
 R-3 9.9 gm. " 1.5 mm

all primaries + secondaries out, no other feathers.

2294 Hester St., Nest L

these birds, some of ~~them~~ them, were hatching at 1300, but not hatched.

R-1 2.3 gm. Down not dry.

L-1 2.8 gm. "

R-3 2.4 gm. "

1905 Down nearly dry in all cases, but still some areas of matted. All show slight darkening in head area.

5 May

0600 R-1 2.2 gm.

L-1 2.7 gm.

R-3 2.4 gm.

Barrow Lane, Nest K

L-3 10.9 gm. 8th Prim. 3 mm.

Flank, all but most posterior abdominal feathers out of skin. Mid-back, humeral, + greater sec. coverts also out. Alula out.

R-1 11.7 gm. 8th Prim. 3 mm. Same as L-3. Eyes open on both.

R-3 9.8 gm. 8th Prim. 3 mm.

WT, 9.6 gm after defecation. Same covering as above, eyes not open.

L-1 9.8 gm 8th Prim. 2 mm.

Humeral not out, others out but not as many as far as in the other 3 birds.

5 May

Barrow Lane, N End, Nest M

No change 0630. , nor at 1915

Ellsworth St., Berkeley

Found a nest yesterday about 1230, with
some well grown young, in hedge bush
by sidewalk along Epis. Church. Did
not check age or number, will do that
today & add it here. Call it nest N.

Barrow Lane, Nest K

1920 R-3 13.0 gm. 8⁺ Prim, 5 mm.
Defecated after weighing. New wt. 12.9 gm
Got off balance pan. All tracts show
sheaths out, few on thigh. Tail shows
signs of coming out. Very active.

L-3 14.7 gm 8⁺ Prim, 5 mm.

Same as R-3, except very quiet.

L-1 13.5 gm. 8⁺ Prim. 4 mm.

Behind others, in that no sheaths out on
thighs, very few on crown, less on ^{post} ventral.
Tail shows ~~or~~ down (?), no indication of
sheaths.

R-1 15.5 gm. 8⁺ Prim. 5 mm.

Same as R-3, L-3. Wt. after
defecation 15.3

Windy here, weights may be a little off.
All gaped at first, crouched later.

2214 Hart St., Nest L

1945 R-3 ~~3.8 gm.~~ 4.0 gm. Spots on
humerus, back, & crown. Head dark. Gaped.
R-1 3.8 gm. Gaped when jarred.
Same as R-3, spots less dark.
L-1 4.4 gm. Same as R-3
L-3 3.4 gm Hatched before 1400. Same as R-1

6 May

2214 Harte St. Nest L

0615 17-1 ~~3.44 gm.~~ 3.5 gm.

Primary buds show thin skin,

17-3 3.8 gm. "

L-1 4.4 gm. "

L-3 3.1 gm. No buds show

all buds gaping whenever moved, shook, or disturbed.

Barrow Lane, Nest K

0640 L-3 14.4 gm. 8⁺ Prim. 7 mm.

Many sheaths out on all tracts ex. tail.

A few posterior ventral feathers have broken thru sheaths, very slightly.

14.0 gm. after defecation.

R-1 15.2 gm. 8⁺ Prim. 7 mm.

Same as above.

R-3 12.8 gm. 8⁺ Prim. 7 mm.

New wt. 12.6 gm after defecation.

Same as others.

L-1 13.1 gm. 8⁺ Prim. 6 mm.

No feathers out of sheath.

Wt. 12.7 after defecation.

Collected L-3.

~~Front of Cassinelle Hall.~~

Barrow Lane, Nest, Nest M

No change at 0655.

Front (E) of Cassinelle Hall

Cannot see or hear any birds here.

Barcroft along Ath. Field, Lower Sec.

Pair of birds here - same pr. as nest C probably.

Found what may be their nest, no eggs, at extreme upper end of section. May be an old nest, however.

6 May

Ellsworth St. Nest N

Collected unknown age bird from this nest. He is larger + more fully feathered than most of mine when they leave the nest. At least one, maybe 2 others in nest. Description will follow later.

Barcroft, by Meth. Church

In cedar just above parking lot saw a bird with band on right leg.

Barcroft along Ath Field, Upper Sec.

Saw bird right near corner of Lana.

Ellsworth St. Nest N

Description of 191, bird mentioned above.

8⁺ Primary 27 mm. All feathers out but sheaths do not show. Crown stripe very plain. Chin, throat, + breast streaked. Still much down adhering to feather tips. Wt. 19.1 gm. Entire ventral surface covered. Estimated age 10-10½ days. Tried to get out of my hand. Carried it in a paper bag in my pocket. - it was quite active and chirped (fright notes) loudly + for long while.

Barrow Lane, Nest K

1930 L-1 17.0 gm. 8⁺ Prim. 8 mm.

Wt. after defecation 16.8 gm. Extremely active on balance. Most sheaths on all parts of body are out. Tail sheaths slightly thin. Many ventral feathers out.

12-1 18.8 gm. 8⁺ Prim. 8 mm.

A few humeral feathers out of sheath. Many ventral feathers out.

6 May.

Barrow Lane, Nest K

R-3 16.6 gm. 8th Prim. 9 mm.

Some humeral, most ventral feathers out.
Flank + mid back have some out.

Outer sec. coverts also out. Tail (outer) 1.5 mm.
All 3 birds were crouched quietly in nest, even when I jacked it. But all were very active in my hand and on balance. No sounds heard.

2214 Harte St. Nest L

1955 R-1 5.9 gm. ~~8th Prim.~~ Last 4-5

primaries nearly out, others about ready.
Crown + back show many dark spots. Humerus dark, thigh shows a few spots.

L-1 7.3 gm. Last 7 primaries nearly out. Flank shows some dark spots. Line of spots on leading edge of wing. Anterior most part of ventral tract is a little dark.

Much the same as R-1, but more.

L-3 5.7 gm. Appears same as R-1.

R-3 6.2 gm. Same as R-1.

all birds (I think) were gaping in the nest. It is very hard to see or even reach in, as it is in the center of the bush.

7 May.

0610 R-1 5.7 gm. Primaries starting out.

L-1 7.0 gm.

R-3 5.6 gm.

L-3 5.3 gm.

Not much different from last evening.

7 May

Barrow Lane, West K

0632 R-1 17.6 gm. 8th Prim. 11 mm.
Sore humeral, a few mid-back, flank, thigh,
most ventral feathers except chin are out.
Alula's both thru sheath. Tail 1.5 mm.
L-1 15.7 gm. 8th Prim. 10 mm.
Tail 1.5 mm. Some sheaths on every
part mentioned above have broken, but
fewer than on R-1. Alula not out.
R-3 15.5 gm. 8th Prim. 11 mm.
New out after defecation 15.3 gm.
Similar to R-1, but 2 outer sec. coverts
on rt. wing, 1 on left wing. Rt. alula out.
Tail 2 mm.

1920

R-1 21.6 gm. 8th Prim. 12 mm +
Several sec. coverts, each wing, are out.
No primaries or prim. coverts out. A few
mid- & lower-back feathers out, a few on
occipital region. Alula & upper tail coverts
out. Tail 2.5, outer rectrix, thigh,
humerus, flank well out. Ventral
feathers all out but chin and throat.
Very quiet in hand & on balance.

R-3 ~~17.5~~ 18.0 gm. 8th Prim. 13 mm.

2nd rt., 2nd ~~rt.~~, 9 left Primaries out.

6th rt., 1-3, 7 left greater prim. coverts
out, others on left out barely or almost.

Upper back with some out. A few dorsal
anal feathers out. Very quiet. Grasped nest.
Tail 2.5 mm. also all feathers out on R-1 are out.
Wt. after defecation 17.7 gm. Active on
balance, got off twice.

7 May
Barrow Lane, Nest K

L-1 18.8 gm.

8⁺ Prim. 12 mm.

Active on balance pan.

After def. 18.4 gm.

Got off balance pan.

Alula out,

2, 4, 5 left primaries out. 8⁺ left greater

prim. covert out. Upper tail coverts

barely hardly out. A few crown out.

Otherwise as R-1. Fairly quiet in hand.

All birds crouched in nest, & clung to it when removed. No gaping at all.

Tail 2+ mm.

Barrow Lane, Nest M

No change at 1915.

2214 Haste St, Nest L.

1955 R-3 8.6 gm. All prim. + sec. are just slightly thru skin, alula thru.

Ant. ventral breast dark, back, crown, flank, humerus + leading edge of wing also dark or heavily spotted, but not thru. Eyes not open.

R-1 8.1 gm. Prim., most but not all sec. slightly out. Alula out. Eyes not open. Otherwise similar to R-3.

L-1 9.9 gm. All sec. slightly thru skin. Eyes partly open. Alula out. Similar to R-3.

L-3 8.2 gm. Eyes not open. All primaries no secondaries slightly thru. Alula thru, barely. Flank not very dark. Eyes not open. Left wing not as far along as right.

8 May

Barcroft, Lower Sec., W. Upper End, Nest O

This nest, one I found 6 May and didn't know if it was new or old, has 1 egg at 0830 today. It is in Cotoneaster, at extreme upper end of this section.

E End of Forestry Bldg

A bird sang from a live oak here a couple times, then moved. Not singing a few minutes later.

Greenhouse Area

No singing birds.

Barrow Lane, Nest M

One young hatched at 1000, Not marked.

Barrow Lane, Nest K

1845 R-1 23.5 gm. 8th Prim. 16 mm.

Rt. prim 2-9, rt. greater prim. cov. 1 & 3 out.

Left ^{prim} 1-8; left gp. prim. cov. 1, 5, 6 out.

No wing feathers far out of sheath.

Rest of body, inc. humerus, well feathered.

Sits quietly on tarsus, little ^{weight} resting

on belly. After defecation wt. 23.1 ±.

Vind. Tail almost 6 mm. ~~Pr~~ Rectrices

+ upper coverts out, anal feathers out.

L-1 20.6 gm. 8th Prim. 16 mm.

As well feathered as R-1. All primaries

except L-9 out. Rt. gpc 4, 5, 8,

left gpc 5, 6, 8 are out, tail feathers +

upper coverts out, Dorsal anal feathers

out. Tail 5 mm.

R-3 20.2 gm. 8th Prim. 16 mm +.

Appears same as others. Rt. prim. 7 & 9, ~~left~~

prim. not out. Rt. gpc 4, 6, 7 out, left

gpc 8 not out. Tail 5 mm. Much as L-1

8 May
Barrow Lake, Nest M

1900 R-3 2.1 gm. Very weak. Most down dry. Spots for humeral + upper back show as light spots thru pink skin.

R-1 2.8 gm. Stronger. Dark streak on head, light spots on back + less visible on humerus. Nopecks. I believe this must be older, the one hatched at 1000 today.

7. — 1 Egg pipped, 1 egg not. A light spot here is dark, but not as dark as a dark spot.

2214 Haste St., Nest L

1915 L-3 11.5 gm. 8th Prim. 2 mm-. No feathers but prim., sec., + alula clearly out, but all others show very well. Looks like blood on this bird when taken from nest - where?

(from under my fingernail, 2 find.)

R-3 10.7 gm. 8th Prim. 2+ mm.

Wing + upper-back + humerus, y.p.c. also out as well as prim + sec. A few flank + abdominal out too.

L-3 G.P.C. slightly out.

R-1 10.4 gm. 8th Prim. 2+ mm.

Eyes open. Same as R-3.

L-1 13.0 gm. 8th Prim. 3 mm.

Very similar, but more feathers on each tract out. Sec. gr. cov. out.

Eyes open.

Either L-1 or R-1 defecated before weighing.

The material just sort of oozed out. When the older birds at nest K did it today, it squirmed out quickly, past edge of my hand.

9 May

2214 Haste St, West L

0700
0610 ~~R-3~~ 12.0 gm. 8th Prim. 5 mm
L-3 10.1 - gm. 8th Prim. 3 mm.
R-1 9.6 g. " " 3 mm.
R-3 10.5 gm. " " 4 mm

Barrow Lane, Nest M

1910 R-1 4.4 gm. Dark spots along back, over head, on humerus. Dark streak on wing. A few spots on thigh.

R-3 3.3 gm. Same as other.

Both birds gaped in my hand.

Nest still contains 2 eggs, neither pipped. When they stretch straight up to gape, they fall over backwards. After just raise neck + front of body, resting on back + abdomen.

Barrow Lane, Nest K

1918 R-3 21.2 gm. 8th Prim. 20+mm. Crown stripe shows well. Rt. g.p.c. 1, 5, 8, left not out. All other prim., sec., + coverts out. Upper + lower tail coverts, tail, anal feathers all out. Sheaths not covered in resting bird. Sits in my hand on toes + ankles, neck drawn in.

R-1 22.7 gm. 8th Prim. 20+mm.

Appears very same as R-3. Defecated before weighing. Got off balance once.

L-1 18.7 gm. 8th Prim. 20mm.

Left g.p.c. 13, rt. g.p.c. 1 not out.

R-1 tried to run, + chirps of adults alarmed L-1 so he got off balance continually, tried to escape. Gave a few flight notes.

9 May

Barrow Lane, Nest K

R-1 had left nest when I put L-1 back.

L-1 also left shortly after being replaced.

2214 Haste St., Nest L1945 R-1 12.4 gm. 8th Prim. 4 mm.All ~~the~~ feathers & covert sheaths out, alula out, sheaths all along back out, feathers at mid-back. Humerus & flank & ~~all~~ abdominal (ant + post) have come out. New molt after defecation 12.1 gm.R-3 13.4 gm. 8th Prim. 5 mm.

Eyes open on R-1 + R-3. As R-1, but also some sheaths on head. Also thigh sheaths out.

L-3 12.9 gm. 8th Prim. 4 + mm.

Same as R-1

L-1 15.6 gm. 8th Prim. 6 mm.

New molt after defecation 15.3 gm.

Farther along apparently than R-3.

New ~~sheath~~ tracts out, but sheaths farther out & more sheaths out.

One of the R-birds made some notes - protest? - when being replaced.

10 May

0610

L-1 13.7 gm. 8th Prim. 8 mm.R-1 11.4 gm. 8th Prim. 6 mm.L-3 11.5 gm. 8th Prim. 5.5 mm.

R-3 12.7 gm. " 7 mm

Wt. after defecation 12.0 gm.

Birds were giving begging notes.

Barrow Lane, Nest K

One bird left in nest as I passed at 0630.

10 May

Barrow Lane, Nest M

0635 R-1 4.8 gm. Primary buds show.
Upper ventral tract shows spots, as does
leading edge of wing.

R-3 3.0+ gm. Leading edge beginning
to show dark spots. A few spots on thigh
starting to show, a few on flank.
Head, back, & wings show well.

Inside Edwards Field

A bird on tennis court fence. Later one
singing from above press boxes. Saw a
copulation in W bleachers. No nest found.

Barcroft along Ath. Field, Nest O

3 eggs, incubating at 08:25.

Barcroft, Center Sec., Extreme Lower part.

A bird singing here, area of nests O+J.
He sings from poplars inside Ath. Field.
At upper end of second panel, a ♀ (?) disturbed.
In continued Coterie here, ^{by ♀} found nest
with 4 eggs. Call this nest P.

Barrow Lane, Nest M

1910 R-1 6.3 gm. Outer 4 primaries nearly
there skin. All reniges about to come forth.
All tracts except tail & anal show well,
altho all are not dark - esp. post. ventral,
& most of ~~the~~ flank. Not all parts of
head tract show, chin doesn't show anything.
R-3 3.6 gm. Primaries show as buds,
and "spines" on first (outer) ~~feathers~~ thigh,
flank, & leading edge of wing all show dark
spots. No dark on ventral tract.

3242
1957

Zonotrichia l. nuttallii

70

10 May

2214 Haste St., North

1930 R-3 15.8 gm. 8th Prim. 9 mm.

A few feathers out of sheaths on tracts on
humerus, mid- + lower back, thigh, and
throat, many out on ventral tract.

On left wing, 2 outer g.p.c., one out slightly. ^{Tail sheath out 4 mm.}

R-1 15.7 gm. 8th Prim. 8 mm.

A few feathers out of sheath on flank,
many on ventral tract. None elsewhere.

Rests on belly with head drawn in.

All birds gape when I reach ~~nest~~ ^{front of nest}.

Tail sheaths barely out.

L-3 16.0 gm. 8th Prim. 8 mm.

Same as R-1 as feathering goes, but a
few feathers out on mid-back and
1 or 2 on thigh.

L-1 18.5 gm. 8th Prim. 10.5 mm.

Same as R-3, even with 2 ^{left} g.p.c. out.

Also a couple feathers out on leading
edge of wing, show slightly on R-3.

Tail 1 mm +. Upper tail covert
sheaths out, on R-3 + L-1 both.

11 May

6605 L-1 16.7 gm. 8th Prim. 12 mm.

Outer g.p.c. on right wing out, outer 3 on
left wing. 5th left prim., 4, 6, 7 left g.p.c.,
slightly thru, as are alulas. Tail almost 3 mm.

R-1 13.8 gm. 8th Prim. 10 mm.

Al. alula slightly out. A number of
feathers out on mid + lower back,
some on flank, a few on thigh.

L-3 14.4 gm. 8th Prim. 10 mm.

Same as R-1 except alula.

Banks
1957

Zonotrichia l. nuttalli

71

11 May

2214 Harte St. Nest L

R-3 18.1 gm. 8th Prim. 11mm.

Both outer 2 g.s.c. out of sheath. Both alulas out slightly. Tail 2mm. Mid- & lower back, flank, thigh, each have some out, ventral tract most out, a few coming in throat.

Barrow Lane, Nest M

0640

R-1 6.2

Alula slightly thru skin, Outer 4prim. nearly thru, other prim + sec slow as buds beneath skin.

R-3 Dead, lying on back. Rather emaciated. Kept as 4195. 3.3 gm. after injection.

Front of Driveway Hall

A pair of birds here chipping excitedly at times, but not as tho I was right at nest. Nest not found.

SE Corner Univ. + Fulton

Pair of birds excited as I was around upper live oak. No sign of young or of nest.

Greenhouse Area

No birds here, one singing farther W.

Extreme W of Greenhouse Area

A singing bird, and at least 1 fledged young.

Barrow Lane, Nest M

1930 Collected R-1. Wt. 8.6 gm. Age 3 1/2 days.

Preserved him as 196. He was able to stretch up and gape without falling over backwards, and gave some weak notes.

11 May

2214 Paste St. Nest L

2000 L-3 15.2 gm. 8th Prim. 11 mm

Rt. Prim. 4-8, Left Prim. 2, 7 out. 1 left gpc nearly out. Mid- + lower-back well feathered. A few out on occipital region. Upper tail coverts out. Tail. almost 3 mm.

Sits on abdomen, ankle, + toes.

R-1 15.4 gm 8th Prim. 12+ mm.

Tail 2 mm. Upper tail coverts out.

Rt. 12^d, left 1st + 8th (less) out. Left gpc. 3, 6, 7 out. Left secondaries

about to pop. A few out on occipital.

Gave protest notes ~~when removed from~~ nest, begged in my hand.

R-3 16.0 gm. 8th Prim. 13 mm.

Rt. Prim. 1, 2, 3, 6-9 are out, rt. gpc.

4. Left prim. 2-9, left gpc., 6+7

all are out, as well as outer 3 left + rt.

sec. Rectrices + upper tail coverts out slightly. Tail not quite 3 mm.

L-1 18.7 gm. 8th Prim. 15 mm.

Rt. Prim. 1-9, gpc. 8, Left Prim.

1-8, gpc. 4, 6, 7 all out. All

left sec. + 4 outer coverts, all at sec.

+ 2 outer coverts out. Rectrices + upper

tail coverts out. Tail 4+ mm.

WT. After defecation 18.2 gm.

All birds stretched way up and yelped when ~~reached~~ reached into nest. Even as I sat to nest I could hear them, from about 5 ft.

Very loud. All clutched very tightly to nest + twigs. All sat as L-3.

3 birds
(1957)

Zonotrichia l. nuttalli

73

12 May

2214 Haste St. Nest L

0600 L-1 17.3 gm. 8th Prim. 16.5 mm.

wt. after defecation 16.5 gm.

out { Rt. Prim. 1-9 gpc 4, 6, 7, 8
left Prim. 1-9 gpc 1, 4, 6, 7
left sec all, sec cov outer 3
rt. " " " " " 7,

R-1 14.0 gm. 8th Prim. 14 mm.

out { Rt. Prim. 1-4, 7, 8, gpc. none
left Prim. 1-8 gpc. 3, 6, 7

3 central sec. each wing not out

R-3 14.4 gm. 8th Prim. 15 mm.

out { Rt. Prim. 1-9 gpc. 4
left Prim. 1-9 gpc. 6, 7

all left sec, 3 outer g. sec. all rt.
sec but central ones & some covs out.

wt. after defecation 14.0 gm.

L-3 13.8 gm. 8th Prim. 12.5 mm.

Rt. Prim. 1-9 gpc 3, 7.

left Prim. 1-8 gpc. 3

all secondaries just on the verge of
coming out. Sheaths cracked, not
quite broken.

all birds gape & leg in nest, some
in hand. All cling to nest. No panic
reaction

1930 L-3 15.8 gm. 8th Prim. 15 mm.

all prim out. Rt gpc 3, 4, 7, left
gpc. 3, 7. Many ^{top} crown feathers out.

R-1 17.1 gm. 8th Prim. 16 mm.

all prim, left gpc. 3, 6, 7, rt. gpc. none
are out. No top crown feathers.

after defecation gm. 16.6

12 May

2214 Haste St., West L 19

L-1 19.3 gm. 8th Prim. 19 mm

Def. before weighing. All rt. spec but 2nd,
all left spec but 2, 3, 8 are out. All
prim. out. Back well feathered,
back half of crown out.

R-3 16.8 gm 8th Prim. 17 mm.

Rt. spec 4, 7, 8 out. Left spec 2-7 out,
1st & 8th cracked. All prim. out.
Very few on crown out.

13 May

0605 L-1 17.7 gm. 8th Prim. 21 mm.

2nd rt. spec left 2, 3, 8 spec out.
Very lousy. Sits on a table & entire
tarsus, interesting on belly.

L-3 13.9 gm. 8th Prim. 17 mm.

all these birds ^{must be} very lousy, as my
hand is covered each time I reach into nest.
Began to rain, & did not continue weighing
as it was impossible to write in book.

1950 R-3 18.0 gm. 8th Prim. 20 mm

Head stripe shows fairly plainly on back
half of head. Under tail coverts not
out. All wing feathers out, coverts
almost cover sheaths of remiges.

Jumped off balance repeatedly.
Rests weight on belly & tarsus.

L-3 17.1 gm. 8th Prim. 19 mm

Same as R-3, but coverts not as far out.
Left spec. 1 not out.

L-1 21.0 gm. 8th Prim. 22 mm.

Same as R-3. All primaries & coverts
out. 24-180313 rt. leg.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

ch
1957

Zonotrichia l. nuttalli

75

13 May
2214 Haste St, Nest L
R-1 19.2 gm. 8th Prim. 19 mm
Rt. eye 5, 6, left eye 3, 4, 8, not
thin sheath. Head less developed
than others. Coverts numbers near
cover sheaths.

14 May
0615 Gone 1, ~~1~~ May have left shortly after
I left them last night.

Bancroft, Nest O

No change. Incubating 4 eggs.

Bancroft, Nest P

No change. Incubating 4 eggs.

15 May
No change.

Corner University and Fulton

This pair apparently still caring for at
least one young.

Main Gate to Campus (V. Gate).

Pair of birds, no nesting activity. R-1
Bancroft, Nest P

at 1630 one bird was hatched.
at 1920 still one bird 3 eggs. Wt. 3.0 gm.
Slight dark spotting on head area.

16 May
0620 L-1 A new bird Wt. 2.5 gm.
Lower not dry, but a few spots show
on crown, + head area shows a slightly
dark streak.
R-1 2.9 gm. Spots showing on
crown + mid - + lower-back, not there
last night.

Saunders
1957

Zonotrichia l. nuttallii

76

16 May

Bancroft, Nest O

This nest is deserted. At 0630: it is filled with leaves and Cotoneaster berries, + 4 eggs.

Bancroft, Nest P

1930 R-1 4.7 + gm. Dots for feathers showing on thigh (2 rows), alula, ~~fore~~ leading edge of wing, humerus, entire back, and crown. No darkening on ventral tract, tho the 2 major areas of it show well.

R-3 3.9 gm. Feather dots show on entire back, faintly on crown, on humerus, very faintly on leading edge of wing. Must be $\frac{1}{2}$ day old now.

L-1 3.7 + gm. Spottings same as R-3.

17 May

0625 R-3 3.9 gm,
L-1 3.7 gm, or better, 3.6 + gm.
R-1 4.6 gm.

No differences from last night. All birds tend to keep head curled under in egg position.

1810 R-1 7.5 gm.

R-3 5.6 gm.

L-1 5.7 gm.

L-3 3.0 gm.

Primaries on larger birds almost ready to come thru skin; spines show on R-1, R-3. Spottings well developed on all feather tracts; ventral tract just beginning to darken. L-3 shows spots on crown, back, humerus, line on head ^{not} very dark.

Bals
1957

Zonotrichia l. nuttalli

77

18 May

Bancroft, West P

- 1905 L-1 8.0 gm. all prim, most sec,
barely thr. Alula not quite thr, or barely.
R-1 10.1 gm. all prim + sec out,
alula slightly out. none as much as 1 mm.
R-3 7.8 gm. all prim, first (outer) 2
sec. are thr. Alula barely thr.
L-3 4.1 gm. all tracts show dark,
none out.

R-3 shows upper ventral tract, some on
throat + chin, dark.

All birds gaped, No eyes open, none held
revers ~~erect~~

19 May

- 0645 R-1 9.5 gm. 8th Prim, 1 mm +,
Wing + mid back feathers somewhat thr
shin.
L-3 3.9 + gm.
R-3 7.5 gm. 8th Prim. < 1 mm.
All prim, + sec. out. GPC just starting
out.
L-1 7.7 gm. 8th Prim. < 1 mm.
Same as R-3

- 1915 L-3 5.4 gm.
Outer 3 prim. barely out, thr shin. All
feather tracts show well, no dark below.
R-3 11.0 gm. 8th Prim. 2 mm.
Some mid-back feather sheaths out, a few
ventral ones barely or nearly. Eyes
almost open. GPC out.
L-1 11.0 gm. 8th Prim. 2 mm.
All spc + gsc out. Eyes open some.

781 ±

Banks, R.C.
1957

Zenaidura macroura

78

19 May
Bancroft, Nest P^o

Back + a few upper ventral feathers out.

R-1 13.2 gm. 8⁺ Prim, 2.5 mm.

Quite a few ventral feathers are out a little. Eyes open some. Many mid-back sheaths thin, also some flank.

20 May

1915 L-1 13.3 gm. 8⁺ Prim, 5 mm.

Prim., sec., gpc., gpc., lesser sec. cov., alula, humeral tract, all back, occipital region, ~~thigh~~ ^{flank}, most of ventral tract, + a few thigh sheaths are out.

Sits crouched up head in. Cold.

R-3 12.9 gm. 8⁺ Prim. 4 mm.

Same as above except no thigh sheaths quite out. Eyes open on both.

R-1 16.5 gm. 8⁺ Prim. 5 mm.

Feathering (or sheathing) same, but more flesh tract out. Some out on leading edge + crown also. Upper tail coverts just thin, rectrices almost out.

All birds meek, canyon side on scales. All shiver w/ cold + wet.

L-3 dead. 4.2 gm. #197.

21 May

1915 R-1 19.8 gm. 8⁺ Prim. 9 mm.

Good number of mid-back feathers thin sheaths. Many flank, thigh, feathers also out. Both parts of abdominal tract mostly out, very slightly in throat region. A couple on neck. A few humeral + lesser coverts out.

Outer gpc on it wing out. Sits very still in my hand. No gaping. Tail (outer) sheath 2 mm.

Banks
1957

Zonotrichia leucophrys

79

21 May

Bancroft, Nest P

L-1 16.2 gm. 8th Pin. 8mm.

A very few mid-back feathers out of sheaths. Also a few on flank, and a couple on ventral surface of thigh. A few humeral and lesser coverts also out. Quite a number of upper + lower ventral feathers out of sheaths. Shivered in my hand, but was fairly quiet. Tail sheaths barely out. Gaped once on balance.

R-3 14.6 gm. 8th Pin. 8mm.

Gaped with begging notes when taken from nest. A few humeral feathers, some mid-back, flank, + very few thigh, many ventral feathers out of sheath.

No coverts. Probably not quite as well developed as L-1. Tail not out. All birds crouched silently when I first got to nest, but L-1 (?) gaped when I shook nest hard. Birds seem rather weak + uncoordinated.

22 May

0615 R-1 17.6 gm. 8th Pin. 11+mm.

Some crown (occipital) + lower back feathers thru sheath, + left outer gsc + rt. dubia slightly thru., in addition to those out last night. Gaped in my hand.

R-3 14.0 gm. 8th Pin. 10mm.

RT, outer gsc out. A few lower-back feathers, more on other tracts than last night. Outer rectrix 2mm -

L-1 14.5 gm. 8th Pin. 10mm.

Both L-1 + R-3 gaped in nest, less

Banks
(1957)

Zonotrichia leucophthalma

80

22 May

Bancroft, West P

active on balance than R-1. Rt. outer 2
gsc, left outer 1 gsc are thru, + a few
lesser coverts. Very few lower-back
feathers broken. Outer Tail 1 mm +.
Not as far as R-3.

Bancroft, Center Sec, Upper End.

Am sure there is a nest here, near old H.
Adult ♂ has been singing here + across
street, and an adult was chipping when
I was in bushes.

Corner Union + Fulton

Male singing here. No sign of ♀ or young
from previous nest. May be in new
cycle.

Bancroft, West P

1900 L-1 17.8 gm. 8th Prim. 12 mm.

Rt. wing g. - 3 outer gsc, 2 alula, 4th - 6th gsc. out.

left " - 2 outer gsc., 2 alula out.

Also some inner gsc each wing, 2nd Prim. on
both wings almost broken thru. Some
occipited, some on all parts of back thru.
Most on throat are out.

R-3 16.3 gm. 5th Prim. 12 mm.

1 outer rt. gsc, 2 outer left gsc, out.

9th Left Prim. out a wee bit. Much
the same as L-1, less out on throat.

R-1 19.8 gm. 8th Prim. 13 mm.

Outer 3 gsc each wing out. 2 alula each
wing out. Left 2-5 Prim. about thru,

Rt 2-4 same. Some sec. each wing

also about out. Many crown + back

feathers out; no part of tail out. Tail 2.5 mm

Sat on balance w/o slouching over.

23 May 1957

Bancroft, Nest P

AM L-1 16.1 gm. 8⁺ Prim, 13+ mm.

When picked up, sat on tarsi, raised body, then compressed rdbt laterally, spread wings. Rt. wing has gpc 3, 4, 5, 6 out, Prim. 2 broken sheath, most sec, broken sheath tip, 3 outer gpc out. Left wing same as far as secondary parts go, 2-4, 6-8 left primaries all show part sheath tip.

Posture mentioned above has neck in, head lowered. Defecated before weighing.

R-3 15.1 gm. 8⁺ Prim. 13.5 mm. Much the same as L-1, Rt wing has 2 outer gpc, 3^d gpc, out, prim. 1, 2, 4, 5 breaking sheath tip. Left wing has prim. 2, 8, 9 breaking, 12 outer gpc out. Defecated before weighing.

R-1 18.1 gm. 8⁺ Prim, 15 mm. Rt. wing: gpc 3-5 out, 1 breaking, Prim 1-5, 7-9 out, 8⁺ almost / suit a bit of sheath remaining. All sec + gpc are out. Left wing: Prim 1-5 out, All sec, 3 outer + sev. inner gpc, no gpc. out. Def. before weighing. Active on balance. Its erect. Put off balance twice.

All touched when I was at nest, L-1 gave protest notes when I took out R-1 + put back R-3. Band on one ad. rt. leg.

Bancroft, Nest O.

These eggs are warm as tho being incubated.

Banks
1957

Zonotrichia leucostriata

82

23 May

Edwards Field Nest Q (4)

0730 In "Quince" trees on E side of field, N of bleachers, found nest with 1 freshly hatched young, 3 eggs. Young still has down matted, weighs 2.2 gm. Marked R-1. Nest is $9\frac{1}{2}$ ft up, + I have to hoist up on a ledge on wall to get to it.

Also a pair of birds around NW corner of this track field.

1905 R-1 3.1 gm.
L-1 ~~3.1~~ 3.1 gm.

Only 1 egg left.

Both sate when moved, resume head under chest position.

Bancroft, Nest P

1920 R-1 21.4 8th Prim. 17 mm.

Rt prim., gpc except 7 are thru sheaths. also all rt. sec + sec. coverts. Left prim., left gpc 3 are out. All left sec + sec. coverts. Rectrices + upper tail coverts out. Back well feathered. Head stripe beginning to show. Very quiet in hand, began to run as soon as placed on balance. Soon became quiet.

R-5 18.3 gm. 8th Prim. ~~15~~ 15 mm.

Rt. prim. 1-8, gpc 3, 5, 7 are out.

Left Prim. 2-9, gpc. 1, 3 " "

Back well feathered, head also but no stripe.

L-1 19.0 gm. 8th Prim. 16 mm.

Rectrices + upper tail coverts out.

Pauls
1957

Zonotrichia leucotis

83.

23 May

Bancroft, Nest P

Rt prim. 1-8, gpc 1, 3-7 are out of sheath.
Left prim. 1-9, gpc 1-7 are out (1st prim.
just barely.) All sec, rt. gpc out,
left gpc not all out. Back + crown
well feathered, crown not striped yet.

24 May

0615 R-1 19.5 gm, 8th Prim. 19 mm.
Left gpc 2, 3, 5, 7, 8 are only wing
feathers out the sheath. Crown stripe
shows well at rear of head, but anterior
feathers still sheathed. Outer rectrix 6 mm.
Outer under tail coverts out, tail + upper
coverts out. Still unfeathered area
on middle of belly. Banded

24/180314 over white band on rt. leg,
R-3 16.7 gm, 8th Prim. 18 mm.

Rt. gpc 2, 4, 6, 8 not out. Left gpc
2, 4-8 not out but some are broken.
All prim. out or essentially so. Crown
well feathered, but stripe not showing.

Banded 24/180315 over blue, rt. leg,
L-1 17.2 gm, 8th Prim. 17 mm.

Rt. 9th Prim., rt. gpc 8 not out, gpc 2
merely broken, not really out. Left gpc 8
not out. Crown stripe beginning to
show but anterior feathers not out. No
under tail coverts out, but rectrices +
upper tail coverts are out. Banded

24/180316 over white, left leg.
All 3 birds in nest when I left, but
may leave, not ready yet.

Banks
1957

Zonotrichia l. nuttalli

84

24 May

Edwards Field Nest Q(u)

0645 L-1 3.3 gm { Feather tracts barely beginning
R-1 - 3.3 gm } to show along back,
still legs.

Bancroft, Nest O

Flushed & off 4 eggs.

NE corner Oxford Center

Found nest in Juniper w/ 4 eggs. This is R(u)
Edwards Field, Nest Q(u)

1900 L-1 5.0 gm. Dark spots on crown
and back. Dark streak on arm, a spots
on humerus, faintly on leading edge of
wing. Faint spots on thigh.

R-1 5.0 gm. Spots do not show
as well.

Bancroft, Nest P

1910 L-1 20.5 gm. 8th Prim. 19 mm.

Crown stripe shows well. Still a ventral
bare area. All wing feathers but not
8th gpc are out, & it has cracked covert.
Well feathered, but wing sheaths still
quite evident. Defecated before weighing.

R-3 19.9 gm. 8th Prim. 19.5 mm.

Crown stripe not quite as good as on
L-1. All wing feathers but left 8th
gpc are out.

R-1 20.9 gm. 8th Prim. mm.

All wing feathers have broken sheaths,
but some are barely out. Crown stripe
shows very well. Very active.

Put all 3 back together in hopes they
would stay. Are ready to leave, but
are less developed than most at this
time.

Banks
1957

Zonotrichia l. nathallii

85

24 May

Bancroft, Nest P

While holding R-1, he turned his head toward me and gaped. One bird once before did this, R-1 was quiet.

I interpreted it before as threat - then, as I recall, it was accompanied by sound. R-1 was still while doing this (i.e., not active).

Bancroft, Nest O

No change. eggs warm.

Ellsworth between Bancroft & Durant

Saw a grown young, flying, ~~but~~ not independent. Maybe 2 birds.

Possibly from Nest N, just a few yards away.

25 May.

Bancroft, Nest O

No change

Bancroft, Nest P

0610 2 birds still in nest, but ready to leave. One was about half over the edge. Did not see the third bird.

Edwards Field, Nest Q (u)

| | | | |
|------|-----|------------------------------|---------|
| 0620 | L-1 | Little change from last mite | 5.1 gm. |
| | R-1 | " " " " " | 4.9 gm. |

Corner Oxford & Center, Nest R (u)

0630 No change.

Edwards Field, Nest Q (u)

1915 R-1 7.7 gm. Spines show on 3 outer prim.
Throat area beginning to have dark spots.
Thigh & flank show spots.
L-1 8.1 gm. + Same as R-1.

26 May 1957

Edwards Field, Nest Q(u)

1930 17-1 11.0 gm. 8th Prim < 1 mm.

All prim + sec. at least a little out. No others out. Active. Eyes open a little.

L-1 11.2 gm. 8th Prim < 1 mm.

Same as above. Both defecated after being weighed.

27 May

1910 17-1 13.7 gm. 8th Prim. 3 mm.

wt. after defecation 13.3 gm.

All remiges + greater coverts + lesser sec coverts are thru skin. Alula + its associates also thru. Flank + mid-back and a few upper abdominal also out. ^{a few} humeral.

L-1 14.4 gm. 8th Prim, 3 mm.

wt after defecation 14.2 gm.

More humeral, also some lower-back + upper-back + leading edge feathers out. A few on thigh also, + some on crown. Eyes open.

Corner Oxford + Center, Nest R(u)

All birds were hatched when I looked at 1500 ± today.

1925 R-1 3.0 Faint humeral spots.

R-3 3.5 Faint back spotting, also.

L-1 3.4 No spots

L-3 3.1 As R-3, Spots both places.

28 May

Edwards Field, Nest Q(u)

0630 Collected both young

L-1 13.8 gm. 8th Prim. 4 mm.

R-1 12.7 gm. 8th Prim. 4 mm.

R-1 is after def. L-1 after def. was 13.5 gm.

ends
1957

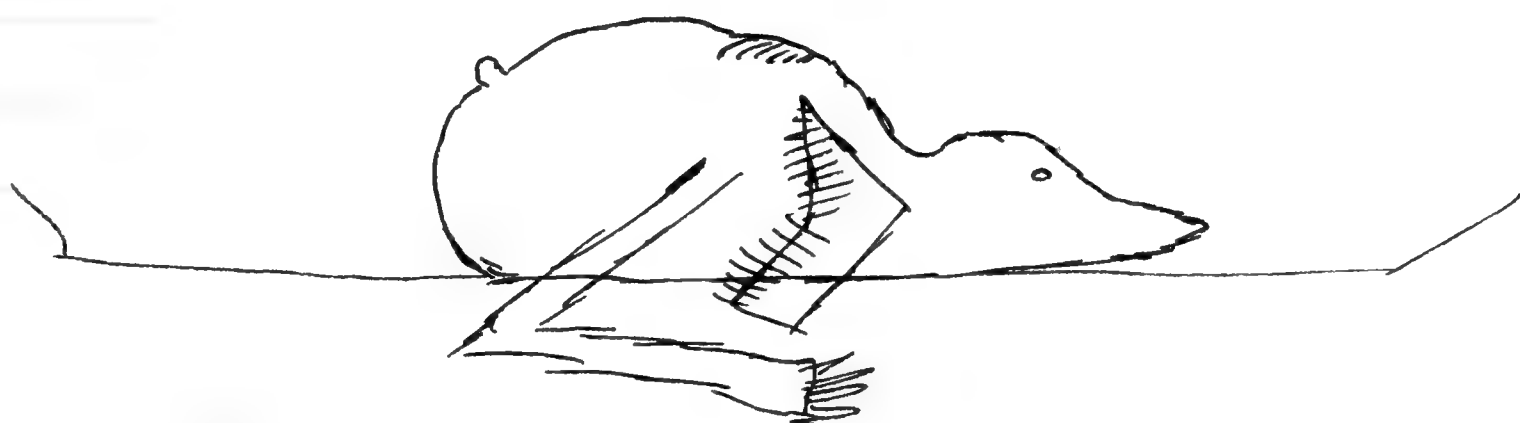
Zonotrichia l. nuttalli

87

28 May

Edwards Field Nest Q (u)

Resting position of birds is such that almost entire ventral surface, from tip of bill to middle of belly, is flat on the pan. Neck is held in, most of the time, stretched out when movement occurs.



R-1 is π 198

L-1 is π 199

Bancroft, Nest O

No change, eggs warm. Am sure nothing can happen now.

Corner Oxford + Center, Nest R (u)

6705 R-3 3.7 gm. Some spots on crown, a couple on flank. Head dark. Back + humerus well spotted. Leading edge of wing shows spots.

L-3 3.2 gm. As above, but no spots on crown or flank.

L-1 3.6 gm. As R-3, but no spots on flank, leading edge fairly spotted.

R-1 2.9 gm. No spots on leading edge of wing or flank, just crown, back, + humerus. Head dark.

Smith
1957

Zonotrichia l. nuttallii

88

28 May

Cover Oxford Center, Nest R(u)

- 1905 R-3 5.0 gm. Spots on thigh.
Other areas well spotted.
L-3 4.6 gm Faint spots on
thigh, a couple on flank.
R-1 4.4 ~~Same as~~ Few spots on thigh
More on thigh than L-3, less than R-3
LR-1 5.1 gm. As R-3.
While I was handling young, adult
bird (♀ I think) was chipping very
close by. She went through a
feeding displacement behavior - pecking
very hard at seed heads of grass and
at the ground, mostly pecking at and
pulling the grass flower heads. The
actions were much faster and stronger
than in typical feeding behavior.

29 May

- 0700 R-3 5.1 gm. Primaries budding out,
Upper abdominal darkening.
R-1 4.7 gm. Same, but not so
much.
L-3 4.9 gm. Same
L-1 5.2 gm. Like R-3.
1900 R-1 6.2 gm. Nothing there
shin yet.
? — L-1 6.8 gm 5 outer st. prim. there.
thru shin. 4 outer left there.
R-3 7.4 gm 4 outer st. prim. there.
Also 4 outer left.
L-3 6.4 gm. None quite there.

30 May

 Corner ~~the~~ Oxford + Carter, Nest R(u)

 1905 L-1 9.5 gm. 8⁺ Prim. 2 mm.

All gpc thin skin, as are all prim + sec. Gsc. not quite thin. Mid back + neck feathers slightly out. No ventral feathers thin skin yet.

 R-3 9.9 gm. 8⁺ Prim. 1+ mm.

Same as above. A few flank feathers out on both.

 L-3 9.0 gm. 8⁺ Prim. 1 mm.

Gpc not quite out. No back or flank feathers quite out, nor flank either.

 R-1 8.4 gm. 8⁺ Prim. 1 mm.

Eyes a little open. Didn't notice on others. Same feathering as L-3.

31 May

 1905 R-1 11.0 gm. 8⁺ Prim. 4 mm.

all remiges + greater coverts out.

Feathers of mid-back + neck out, some on lower back. Some of crown out. Ventral, flank, thigh, humeral out, a few on leading edge.

 R-3 12.6 gm. 8⁺ Prim. 4 mm.

Same as above, + more leading edge feathers out. Spines show on tail on both.

Eyes open on both.

 L-3 10.9 + gm. 8⁺ Prim. 3+ mm.

Same as R-1

 L-1 12.0 gm. 8⁺ Prim. 5 mm.

Same as R-3.

Bancroft, Nest O

legs, cold. Nest deserted.

Banks
1957

Zonotrichia l. nuttallii

90

1 June

S. End Barrow Lane

A singing ♂ here, but not nesting apparently. Saw an immature bird, from last nest probably.

N. End Barrow Lane

Also a singing bird here. Flushed ♀ and found nest with 4 eggs. It is in upper crotch of a low shrub-like tree, opposite front out-jut of Adm. Bldg. ♂'s first singing perch was very near nest. Nest S(u)

Corner Oxford Center. Nest R(u)

1905 L-1 15.6 gm. 8th Prim. 10 mm.

Upper & lower tail covert sheaths out, rectrices barely out. A few mid-back feathers out of sheaths - not over a dozen. Many posterior ventral feathers thru sheaths. Rets w/ lead in, but extends it sometimes. Very still in my hand.

R-3 16.4 gm. 8th Prim. 8+ mm.

Many ventral, no back feathers thru sheaths. Tail covert sheaths are present. Rectrices not quite out.

R-1 14.3 gm. 8th Prim. 8 mm.

A couple mid-back feathers out of sheath, + a number of flank feathers also along with a large no. of ventral ones.

L-3 13.9 gm. 8th Prim. 8 mm.

Active in scale floor, tried to walk. Couldn't do much. By far the most active of the bunch.

Banks
1957

Zonotrichia l. nuttalli

91.

2 June

Corner Oxford + Center, West R(u)

1910 R-1 15.2 gm. 8th Prim. 11 mm.

All st. primaries nearly out - sheaths broken. 1st (outer) gpc, each wing, out. Many back, a few crown feathers out. Many humeral, a few leading edge, most flank + thigh, virtually all ventral, but no chin or face feathers out. Upper tail coverts out - in feather.

R-3 18.2 8th + 9th Prim. 12 mm

As above, but also many lesser sec. coverts out, Alulas slightly out. Lower tail coverts out. More leading edge out.

L-3 15.8 gm. 8th + 9th Prim. 12 mm.

Gave a protest or fear note, as did R-1. About same as R-1, but 3rd left prim. definitely out, & a few gpc broken. Tail coverts not out, secondaries + most coverts barely out or almost.

L-1 ~~12.3~~ 12.3 gm. 8th + 9th Prim. 14 mm.

Rt. Prim. 8 + 9, rt gpc 5, left prim 2-7, left gpc 5, are out. Upper tail coverts out. Alulas + largest alular coverts out. Sec. + sec. coverts out or nearly so.

Barrow Lane, West S(u)

Still 4 eggs at 1640.

3 June.

2 yng., 2 eggs at 0705. See next pg.

Between Curwille + Durant Halls

Found nest w/ 1 egg in mint(?) here

It is nest T(u)

Baird
1957

Zonotrichia l. nuttallii

92

3 June

Barrow Lane, N. End, Nest S(u)

0720 R-1 2.15 gm. Down gray, up to about 15 mm. long. On top of head, occipital area, mid back, humerus, and forearm, and flank. A few faint spots show on crown, some rows very faintly length of back (not neck). Humerus shows spots + forearm (=hand) shows a dark streak.

R-3 2.5 gm. Same as above.
Still 2 eggs in nest.

Corner Oxford Center, Nest R(u)

1905 R-1 17.2 gm. 8th Prim. 15 mm.
all primaries out. Head + back well feathered, but still a lot of bare skin.
All but 2nd rt gpc, but only 4th + 7th left gpc have broken sheaths. Upper + lower tail coverts + rectrices out of sheaths.
Gave some notes - not flight or fear or begging, but just plain notes in my hand. Banded 24/180317 under blue on rt. leg.

R-3 20.0 + gm. 8th Prim. 16 mm.
Rt gpc 3, 5, 7, left gpc 2, 3, 6, 7 have broken sheaths. All primaries out. All sec. + all but about 2 each wing gpc. also (this also applies to R-1.)
all tail feathers out of sheath. Head well feathered except front, stripe not showing. Banded 24/180318 ~~under~~ under blue left leg.

L-3 17.1 gm. 8th Prim. 16 mm.
Head, back, + tail as in R-1.

Banks
1957

Zonotrichia l. nuttallii

93

3 June

Corner Oxford + Center, Nest R(u)

All prim., left 4+5, rt. 4th gpc. have
burst sheath. All sec. + gpc. out.

Banded 24/180319 left leg, blue over white
rt. leg.

L-1 18.4 gm.

8th Prim. 18

5, 6, 8 rt. gpc., 1-5 left gpc. out.

All prim. out. Head + back as R-3

2 rectrices not out (center 2, rt. side,

Banded blue over white left leg, 24/180320
rt. leg.

All birds gave protest + a few notes,
were active + hard to handle.

Barrow Lane, Nest S(u)

1950
165

R-1 3.2 gm.
with dark spots.

Humeral area

R-3 3.5 gm.

As R-1, possibly darker.

Still 2 eggs.

Between Whinnell + Hurst, Nest T(u)

2000

♀ was on nest, is she incubating
one egg?

4 June

Barrow Lane, Nest S(u)

0655 R-3 3.9 gm. Humeral spotting still
faint on leading edge. A few spots on
flank + thigh.

R-1 3.4 gm. Same, thigh spotting
lighter, seems deeper (in bird).

Still 2 eggs.

Corner Oxford + Center, Nest R(u)

Between Whinnell + Hurst, Nest T(u)

0700 Flushed ♀ off leg in nest. Must surely
be incubating.

Banks
1957

Zonotrichia l. nuttalli

94

4 June

Corner Oxford Center, Nest R(u)

1905 L-1 19.7 gm. 8+9 Prim. 22 mm.
Began to chirp as soon as I touched it, others
were quiet. Both adults & this young
made great fuss w/ alarm notes.

Primary sheaths not quite covered by
extended part of spec. Head stripe shows
well. Ventral coverts not quite covered.
One adult picked at my hand while
covering nest & to prevent others from leaving.

R-3 21.0 gm. 8+9 Prim. 21 mm.

As above, Crown stripe not as visible,
primary sheaths a little more covered.

Not much difference.

L-3 17.6 gm. 8+9 Prim. 20 mm.

Head stripe less developed & prim.
sheaths less covered than either
above. Breast stretching shows well
on all of them.

Did not see or get R-1.

Barrow Lane, Nest S(u)

1935 R-1 5.1 gm.

Dark on flank & on thigh, Back, crown,
head & abula, leading edge. Ventral tract
(upper part) a little darkened. Primaries
budding.

R-3 5.4 gm. Spots in same areas,
but not as plain - appear to be deeper under
skin. Primaries not budded as much.

Quille & Lurant, Nest T(s)

No change at 2000. Definitely incubating.

5 June
 Barrow Lane, Nest 5 (u)
 0650 R-3 6.0 gm. Four outer primaries
 bulging thru skin. Extreme upper ventral
 tract + throat showing dark spotting.
~~R-4~~ Lays on side rather than belly.
 R-1 5.5+ gm. Not quite as far
 along as R-3, either on primaries
 or ventral spotting. Not as much
 spotting on throat. Other than these
 2 points, very much same.

Righted himself from side to belly.
 1938 R-3 10.6 gm. 8th Prim. 4 mm.
 A few wing sheaths out, some all
 along back, Flank + thigh as well
 as some on all parts of ventral tract
 are out.
 R-1 9.9 gm. 8th Prim. 3.5 mm.
 Not as far as R-3 - fewer sheaths
 out on flank + thigh.

Melospiza
 Melochia

Between Whinnell + Durant Nest T (u)
 No change 1940

Barrow Lane, Nest 5 (u)
 1945 R-3 8.0 gm. Prim. not quite out.
 R-1 7.7 gm. " " " "

6 June
Between Whinnell + Durant Nest T (u)
 No change at 0700.

6 June

Barrow Lane, Nest S(u)

- 0655 R-1 7.9 gm. 8th Prim. 1 mm.
Both gaping when I touched nest. R-1 has
eyes open & shit. Primaries all neat,
sec., gsc, & slow as buds yet, gpc can be
seen under skin. Alula out. No more.
R-3 8.4 gm. 8th Prim. mm.

Same in all respects as R-1.

Barcraft along 4th Field - Center Sec.

Saw a banded young bird - alum. over
white on left(?) leg. Flying, but still
with parents. This is L-1 from nest
P, banded 24 May. (R-1 if it is
right leg). Jay Schnell reports
seeing this bird yesterday.

Barrow Lane, Nest S(u)

- 0945 R-1 10.3 gm. 8th Prim. 2 mm.
All prim., sec., & gpc are out of skin.
Mid-back feathers not quite out. No
ventral sheaths out yet. Some on
humeral almost out. Alula out.
R-3 10.7 gm. 8th Prim. 2 mm.
Some humeral & gpc feathers out as
well as those on above bird.
Mid-back, flank, & ventral tracts
just breaking skin.

Between Humelle & Hurant, Nest T(u)

No change at 2000 hrs. today.

7 June.

No change at 0730.

Banks
1957

Zonotrichia l. nuttallii

97

7 June.

Barrow Lane, Nest S(u)

Collected both young at 0730. R-1 is
R-3 202, R-3 is R-3 203. R-1 was 10.7 gm.
8th Prim 2.5 mm. Very little change
from last night, R-3 weighed 11.1 gm.
R-3 8th Prim 3 mm.

Between Quivelle + Durant, Nest T(u)

No change at 1900.

17 June 1957

U.C. Campus Berkeley, Alameda Co., Calif.

This morning I checked all the areas which
have had nests this year. I could find
nothing. Found 2^p singing birds only.
Saw nearly full grown young being fed
across street from nest A, in an area
where I could not find the pair's 3rd
nest.

15 June

Between Quivelle + Durant, Nest T(u)

There is now one young in this nest,
several days old. A few back and
humeral feathers were just broken
then sheath.

R. C. Banks
Species Accounts
1956 - 1957

Melospiza melodia

Banks, R.C.
1956

Song Sparrow

1.

28 Jan. Berkeley 2407 Atherton

Giving peculiar chipping note. A pair, one or both fanned tail broadly.

Corner Pres. Rd. + Wickson, UC Campus

Singing bird in patch of berries, N.W. corner.

Flew east toward another singing song sparrow. returned shortly. Another

Foot bridge (concrete) to Pres. Rd. N of Wickson

A singing bird here, about 50 ft upstream from road-bridge.

31 Jan. 2226 Channing (adjoins 2407 Atherton)

Pr. of birds.

S.E. corner LSB, campus.

One bird feeding in grass along bldg.

Corner Univ. Dr. + Wickson

A singing bird. The same or another bird just W along stream. Possibly two birds singing opp. N.E. door LSB, just to the south-west. Neither sang often. May be 2 birds or 1 bird with 2 songs.

Path going N. from Wickson, E side of creek

A singing bird. Played in bushes just east of creek. Crossed creek, went N. 20 yds, sang again later near path, near concrete foot bridge. Song had a raspy quality - 2 3 4 5 - - - . Occasionally left just 3-5 notes off song. See map, pg. 4 of journal.

10 Feb. Along athletic field on Bancroft St. - East

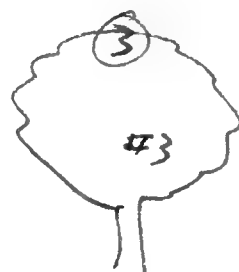
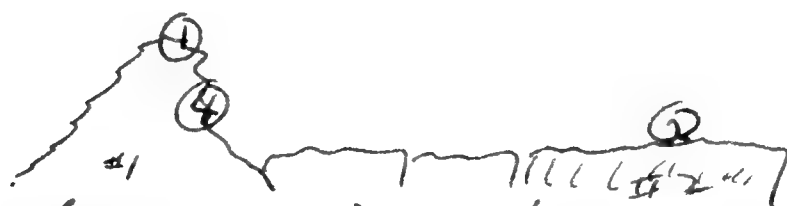
When 2 White-crowns flew into bushes, Song Sparrow flew to cyclone fence atop cement wall, sang loudly. Later flew to Unitarian Church yard, landed in large tree, sang once.

Banks R. C.
1956

Song Sparrow

21

10 Feb. Main Entrance to Agr. Bldg., campus
Song Sparrow (♂) singing atop Thuja. Flew to lower perch, continued singing, after pedestrians passed. I had heard this bird from about 100 yds. Very loud. Clean looking, bright bird. Robin momentarily chased him off perch, I think just passing by. Immediately returned, continued singing. Series in seconds at which he sang follows: 56-9-23-36-47-56-4-10-20-27-35-41-51-01-9-16-25-37-49 (new song)-59-8-16-25-35-42. Series mark beginnings of songs, which lasted about 3 seconds. Songs delivered from a Willow (?) tree about 15 yds. from first perch, 7± from second.



Stopped singing for several minutes, Reappeared singing about half way to top in perch 1. His mate was feeding quietly on ground between perches #1 and #2. She went under tree of perch #1 when I approached. Did not see her again. This may be a good pair to work on: ♂ has at least 2 songs, sings loudly. Could be recorded, the background noise is great.

Along creek just N. of Wickson, E. of Pres. Rd.
Heard bird singing, not loud, by road bridge. Another bird (♂) by foot bridge farther up. ♂ stopped singing, and a ♂ sang by foot bridge. Another ♂ sang by road

Banks, R. C.
1956

Song Sparrow

3.

10 Feb. Along creek just N. of Wickham, E. of Res. Rd.
bridge. Songs alternated for a while. ♂ by
foot bridge soon singing violently, after.
Road bridge ♂ stopped. I saw foot bridge
bird, not the other one. Both were quiet
after a few minutes. I squeaked by foot
bridge. ♂ started to sing from near road
bridge, fairly loud, from ground near
foot of live oak. When all became
quiet, I squeaked again. Road bridge ♂
answered with song, from farther away.
Saw a bird above foot bridge, but it did
not sing. Probably the boundary of these
2 birds is not determined yet. My
presence may have inhibited foot bridge
bird. This is probably the one I watched
several days ago. Soon heard one
singing S. of road bridge, probably
road bridge bird of before.

13 Feb. Main entrance Agr. Bldg., campus.
Bird sitting, singing in Thuja, same
location as before.

N.E. corner Univ. Dr. + Hayland

One bird singing in low shrubs. Sang
only a few times.

Steps to Calif. Hall, on side of L.S.B.

A song sparrow singing in tree here. Another
bird flew in, first bird flew to Thuja
by flag pole, sang twice, warbled a
little. Then 2 birds flew toward
Blue Spruce by N.E. corner L.S.B.

Across street from S.E. corner Wheeler Hall.

Very secretive bird. Along high bank of
stream.

Banks, R.C.
1956

Song Sparrow

4.

13 Feb. S.E. corner LSB, campus

One song sparrow singing regularly here.

17 Feb. S.E. corner Durant Hall

0755 Song sparrow singing by steps here. A
mistake here, I lost track of him. Another
bird started singing by SW corner Wheeler
Hall. Soon both were singing. Durant
bird begins with 5 notes, Wheeler bird with
3. Wheeler bird hoarser.

0815. Between rear (NW) Occ. Art and rear (SE) Union

A bird singing in low bushes along stream.
First 3 notes of song seemed to come from
somewhere other than last post, sort of
ventriloquial effect. Often gave a trill
only, or a trill preceded by a chirp.

Another bird sang a few times, closer to
Union. First bird moved, heard his trill
to S. side of Union. May be two song
sparrows very close together here.

Rear (NE) Faculty Bldg., campus.

Faint beginning of song sparrow song.
Later one sang a few times. In a
few minutes one sang a few times along
stream, a little ways E. of Fac. Bldg.

NE corner Physics Bldg., S. of Anthro. Bldg.

A bird singing from ground. Small
bunch of shrubs here, does not offer
much ground nesting cover. Only saw
the one bird.

Main entrance Agr. Bldg.

Pr. of Calif. Jays using song sparrows
usual perch here. Could not find any
sparrows.

Banks, R.C.
1956

Song Sparrow

5.

19 Feb. 2214 Haste St., Berkeley

two song sparrows in my backyard.

20 Feb. N. of MVZ, Campus.

Heard song sparrow sing several times between 8:30 - 9:30 A.M. Have not noticed him before. Rain today may cause his moving around. (Observed from office).

24 Feb. N. across street from LSB, along creek by stone lamp Bird singing, easily identifiable by song. 2 high squeaky notes, one even higher, somewhat buzzy, followed by trill of 6-8 clear notes, sometimes ending with extra warble. Would sing for a couple minutes, stop for a couple.

Across creek from NE corner LSB. ♂ singing in plum tree. Sang a few times, flew E, heard singing from there. Seems to be patrolling. Saw ♂ singing in ~~at base~~^{cupressus} under Louis Oak where pipes cross stream. This is 5 minutes later but I think it's same bird. Probably 100 yds stream distance from other spot seen.

27 Feb. S.W. corner Wheeler Hall. Singing bird in shrubbery. 3 notes followed by a trill on the same pitch, or a little lower. Very clean looking bird. Lifted his tail before defecating. Sang for several minutes without changing position. After about 5 minutes, changed song, sang new song once, flew to ground. Moved along W side Wheeler Hall.

N.W. corner Wheeler Hall What appears to be same bird as before, but singing a different song.

1. The first part of the paper is devoted to the study of the

2. properties of the solutions of the system of equations

3. (1)
$$\frac{dx}{dt} = A(x)y, \quad y(0) = y_0,$$

4. where $A(x)$ is a matrix-valued function defined on the interval

5. $[0, \infty)$ and y_0 is a vector in \mathbb{R}^n .

6. The second part of the paper is devoted to the study of the

7. asymptotic behavior of the solutions of the system of equations

8. (2)
$$\frac{dx}{dt} = A(x)y, \quad y(0) = y_0,$$

9. where $A(x)$ is a matrix-valued function defined on the interval

10. $[0, \infty)$ and y_0 is a vector in \mathbb{R}^n .

11. The third part of the paper is devoted to the study of the

12. asymptotic behavior of the solutions of the system of equations

13. (3)
$$\frac{dx}{dt} = A(x)y, \quad y(0) = y_0,$$

14. where $A(x)$ is a matrix-valued function defined on the interval

15. $[0, \infty)$ and y_0 is a vector in \mathbb{R}^n .

16. The fourth part of the paper is devoted to the study of the

17. asymptotic behavior of the solutions of the system of equations

18. (4)
$$\frac{dx}{dt} = A(x)y, \quad y(0) = y_0,$$

19. where $A(x)$ is a matrix-valued function defined on the interval

20. $[0, \infty)$ and y_0 is a vector in \mathbb{R}^n .

21. The fifth part of the paper is devoted to the study of the

22. asymptotic behavior of the solutions of the system of equations

23. (5)
$$\frac{dx}{dt} = A(x)y, \quad y(0) = y_0,$$

24. where $A(x)$ is a matrix-valued function defined on the interval

25. $[0, \infty)$ and y_0 is a vector in \mathbb{R}^n .

26. The sixth part of the paper is devoted to the study of the

27. asymptotic behavior of the solutions of the system of equations

28. (6)
$$\frac{dx}{dt} = A(x)y, \quad y(0) = y_0,$$

29. where $A(x)$ is a matrix-valued function defined on the interval

30. $[0, \infty)$ and y_0 is a vector in \mathbb{R}^n .

31. The seventh part of the paper is devoted to the study of the

32. asymptotic behavior of the solutions of the system of equations

33. (7)
$$\frac{dx}{dt} = A(x)y, \quad y(0) = y_0,$$

34. where $A(x)$ is a matrix-valued function defined on the interval

35. $[0, \infty)$ and y_0 is a vector in \mathbb{R}^n .

Banks, R.C.
1956

Song Sparrow

6.

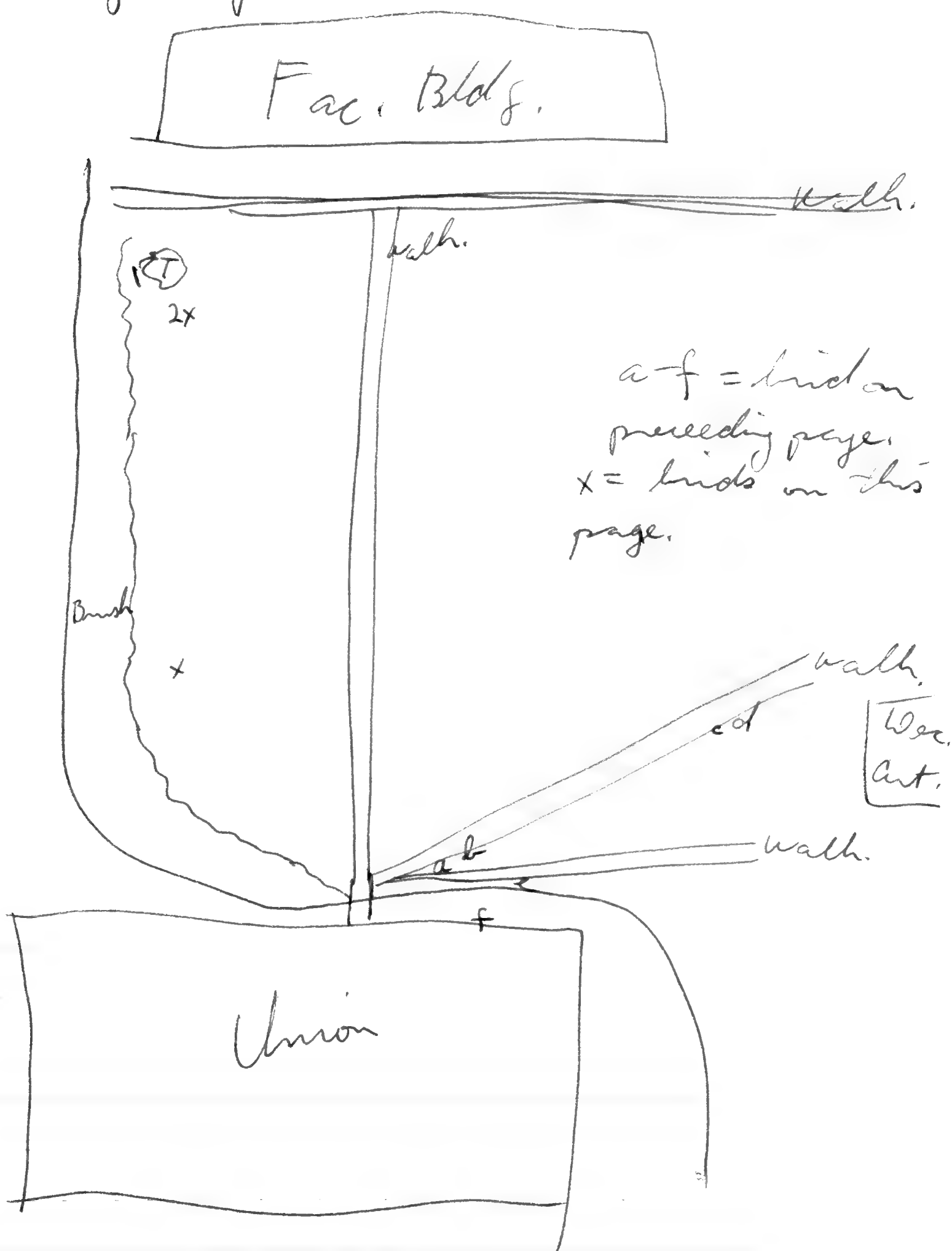
27 Feb. E. of Union, trail to Occ. Art - A singing bird in plum tree E. of path. First 5 notes same, but 4+5 faster. Flew into low shrubs about 6 ft. away. Resumed singing (new song) about 10 yds SE, along path to cafeteria. Flew 20 yds. farther along path, sang in low Sequoia. Moved higher in tree (Pines?) sang, but not frequently. 17 sec. 15 sec. 25 sec. 25 sec. These are times between ends of songs. Moved farther SE, into last tree in that line, continued singing. Flew NW again into Pines. Had been in end trees for about 5 min. Changed song, sang first one again. Sang second song down about second perch. Only a minute or so passed between this change. Flew into bushes where I saw a bird. 17 Feb. Continued singing. Just singing and I lost him. Sang again (2 min + later) across stream, close to E side Union. A dog walked by there, flushed several birds. My bird? flew from shrubs to ground kept singing. I moved around there. Flock of Oregon Junco feeding on $\frac{1}{2}$ slice white bread. Song sparrow singing to E, could not tell which side of stream. Flock of Varied Thrushes moved in. I walked down along stream, heard Song Sparrow singing in first perch. Still singing when I left. Field E. of Union - One bird feeding in grass with flock of Robins + Ore. Junco

Banks, R.C.
1956

Song Sparrow

7.

27 Feb. Field E. of Union - Robin pecked at it,
it flew, ~~Junco~~ flew at it. Song sparrow
flew to Rhododendron, sang once, fed
on ground near bush. This is along
stream, N. side of walk. Another ?
bird singing farther upstream. In a
couple minutes, 2 song sparrows feeding
in grass farther E.



Banks R.C.
1956

Song Sparrow.

8.

27 Feb. Rear (E) of Fac. Bldg. 2 Song Sparrows singing, one East + one West of a N-S walk. Alternated, songs very similar. One right along E wall Fac. Bldg. Other, further E., along stream.

Ell, E. side Physics Bldg. Heard bird sing twice, couldn't find him.

S. of L.S.B., by Parking Lot - singing bird.

29 Feb. S. of L.S.B., by Parking Lot. - Bird singing near top of small bare tree. First two notes in song gave ventriloquial effect.

E. of Grounds + Bldgs., Ad. Bldg. - a singing bird on top of hedge here.

2 March. S.E. Corner L.S.B. - Song sparrow singing at corner of parking lot, flew to other corner of lot, sang again. Flew about half way on N. side Dunsmuir Hall, lit on ground. (from NW - NE corner parking lot). When I approached him he returned to tree in middle N. side of parking lot, sang some more (3 times). No sign of mate, not much cover in area. Sang from tree by walk.

E. Side Wheeler Hall Two singing birds. One was about $\frac{1}{3}$ of way N from S.E. corner, other at N.E. corner. Sang alternately. Gradually approached each other at center of bldg. No fight. Both retreated, but corner bird gave more ground, clear back to corner, sang violently. Bird along side stayed in center, sang fiddle, meekly, and from ground. Wall bird feet on ground.

Barlow, R.C.
1956

Song Sparrow

9.

2 March E Side Wheel Hall ♂ joined by mate who began to warble. ♂ sang loudly once. Corner male approached. Wall ♂ jumped into bush. Both sat in same bush, 6-8" apart, no fight. ♀ joined them in bush. Then all 3 fed close together on ground. ♀ fed with 1 ♂, other by self. ♀ postured to ♂. ♂ ignored her, then all of sudden they were fighting, fluttering up about a foot, bill to bill, she posturing when they returned to ground. ♂ jumped into bush, sang loudly. Other male went back toward NE corner, disappeared. Pair fed along wall, working toward SE corner, ♂ singing from ground occasionally. I could not tell birds apart. I thought corner ♂ was making out with ♀, but she stayed with wall ♂.

Soon ~~wall~~ ♂ a ♂ sang at SE corner, ♀ flew from wall down there, ^{warbling} ♂ sang in center of wheel & side. Another ♂ sang at NE corner. In a few minutes I found one bird (♂?) at SE corner, heard one on E side and one at N.E. corner.

E Side Union Bird singing along NS walk to Dec Art. Another bird singing close to Union Bldg, probably on N side bridge. First ♂ sang from Prunus at corner of long E-W walk to Fac. Bldg. Second bird from tall shrub just N of bridge, by steps. Sang alternately. No sign of ♀ in either place.

Barks, R.C.
1956

Song Sparrow

(1).

2 March S. side Capteria One song sparrow
chipping in low Juniperus and on railing.

4 March E. side Wheeler Hall - As I came
all was quiet. Then bird at NE corner
Wheeler began to sing. After 3 or 4 songs, a
bird sang at SE corner, moved to center of
wall. Both were quiet after a few more
songs. Bird in center sang some very
weak songs. There was now a
pair of birds in center, possibly a pair
at NE corner. There are definitely 2 pairs
of birds here. The boundary seems to
be a little North of the center of the
building.

SE Corner Barrow Lane + Eshleman Rd - Bird
singing from ledge, right at corner. Flew
S. to farthest fence post, about 50-60 ft.
Sang from this post. Then flew.

8 March Edge Parking Lot, SE door LSTB - Bird
singing in leafless brick. Stopped when
White-throats in area started to fight.
Maybe same bird singing later along W edge
of parking lot.

SW corner Wheeler Hall - Bird singing in top
of pruned Platanus. Not there on my return 5
minutes later.

9 March Corner Eshleman Rd + Barrow Lane - Song
Sparrow in lawn of housing office. Flew across
street to ledge, where he sang. Some distance
E of Barrow Lane. Think I saw 2 birds here, but
am not sure. Flew to tree across street, even
farther from corner.

anks, R.C.,
1956

Song Sparrow

11.

9 March Rear (E.) of Union Bldg. - Song Sparrow
singing in tree just N of bridge. Could not
find a female anywhere around.

E. of Dec. Art Annex - Bird singing in
clump of Acacia. Flew across walk,
sang from Juniper. Returned to ground
under Acacia. Joined bird in hedge
across walk. Both jumping around, uttering
soft notes + occasionally weak phrases of
song. Notes were soft, liquid, almost
thush like. After this was playing for
several minutes I flew to another section
of hedge, sang loudly. Returned to Acacia
and sang.

Rear (E) of Fac. Bldg. - Two sets of birds
here. One pair, ♀ trilling + porturing, by
bridge closest to building, this bridge runs
E-W. Another bird singing E of bridge
running N-S, farther up stream.
Singing bird is high up in Sequoia.
Moved low into shrubs along stream.
Preened under right wing with bill. Continued
singing. Another bird singing still
farther upstream. I moved away and
returned to N-S bridge. Saw bird sitting
on rail, a ♀ trilling close to bldg. Bird from
bridge mounted tree + sang. Trilling bird in
dead material of tree, seemed to be churning of
nest material. Flew without anything to down part
of Sequoia near bridge. ♂ started to sing.
I have couple tail feathers on right side
broken or bent down - Easy to spot. Both
birds now on ground, very close.

9 Mar. Rear (E) of Fac. Bldg. - Saw on N-S bridge. -
One bird flew across creek toward bldg.
Other flew + to this across creek. Followed
by third bird which I had not seen.
These two fed near edge of shack (garbage
shed?) near building.

NE corner Campus Cafeteria - Song sparrow in
hedge catty-corner cafeteria sign. Another
(or same) in a minute in hedge bordering
walk due West. This one flew South,
along Women's ath. Field. Bird song in
trees N. of Cafeteria.

E. Side Union - Three birds singing
in this area now. One is along bldg. near
NE corner, where stream turns. Another is
upstream, possibly toward road. Third is
downstream, probably across bridge.
Upstream bird quiet, center bird quiet
and moved. Downstream bird kept
singing, in bushes along stream
behind Dec Art. Center bird resumed
singing in corner of bldg., both
other birds quit.

E. Side Wheeler Hall - Bird singing at S.E.
corner.

12 Mar. N. of LSB along creek - One bird
singing by stone lanterns. Another flew by,
squeaking. 1st one followed. Both worked
upstream, above falls, where they fed.
NE Corner Union. Hq. + Hoagland - One bird
singing. Could not determine presence of
another bird.

12 Mar. N. Side Calif. Hall - Bird singing from two live oaks by patch of low Junipers. E side Wheeler Hall - Singing bird at S E corner. Quiet when many people started by. Could not locate him then.

Eshleman Rd, Opp. Housing Off. - Singing bird on hedge. Flew S.E. to hedge along Barnum Lane, Rear of Moranda + Bldg, where he sang from fence post near corner. Flew on ~~S.E.~~ after 5 min., sang once from seedling, went to ground. In a minute resumed singing from top of a tree. Flew farther S. to opp. center of Adm. Bldg. Sang from small Madrone. Heard another bird near where I first saw this one. This one perched up, flew N toward original spot, but I lost him.

Rear Union, by S E corner - Singing bird on large stump, sang several minutes. Moved to heavy cover on ground when Calif. Jay appeared. Lost him, then heard a bird, I assume same one, a little E. across path. This bird sang in triangle formed by paths. Alternated with another bird by NE corner Union. Both stopped.

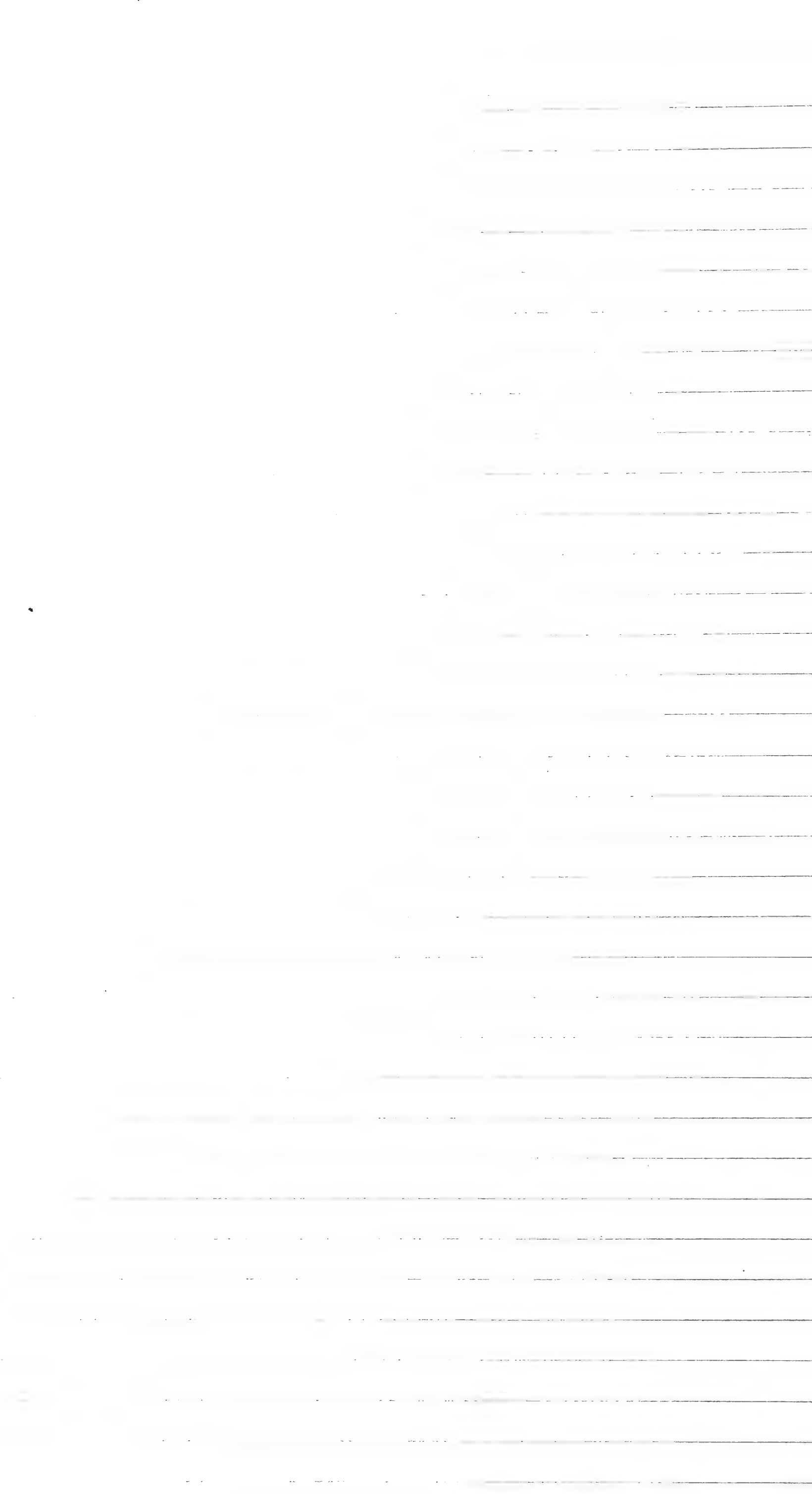
NE corner Union, Rear - This bird stopped singing, and when I went over I couldn't locate anything.

Rear of Fac. Bldg. It is now going on 9:00, after 0830 + I can't find a bird of any kind.

Corner Bancroft + Barnum Lane - Bird sang from hedge.

13 March Corner Dana + Allston by Men's Gym
 Song Sparrow singing in live oak. Joined
 by another bird from hedge. One trilled,
 then flew W. to another tree. One in first
 tree sang once, one in other tree answered
 by a short trill. Later (5 min)
 a bird (same one?) sang from third
 tree down line on Allston. (5 trees
 here - started on corner, progressed West).

14 Mar. E. of Men's Fac Club - As I passed NE.
 corner, stood on bridge, a bird flew
 around the corner, along stream on
 N side of Bldg., sang once. Another
 bird sang, patrolling, for quite a
 while to E. of N-S bridge, along stream.
Bridge S. of Physics Bldg. - Between Union +
 Men's Fac. Club. - Pair or maybe 3
 birds here, just E. of bridge along stream.
E. of Dec. Art Annex - Hear 2 singing
 birds from here. One is right in front
 of me, across walk from Acacia patch.
 Other is by Cafeteria, on NW corner or
 along N side. This one stopped, just
 one quiet after a few unanswered songs.
 First bird into Acacia on ground.
 Second bird resumed singing, first one
 answered from Acacia, moved to live
 oak across path to N. Second bird
 is in shrub W of path from Cafeteria to
 Union, by corner of old building torn
 down.



Bank, R.C.
1956

Song Sparrow

15.

15 Mar. Barcroft along 4th Field, Center section - A bird feeding almost at lower end of center section. Looks small.

Corner Barrow + Ehlman - Bird singing from fencepost by hedge. 15 min. Later had moved 7 fenceposts S, still singing. Returned to original post as I walked by. E. of Union - Bird singing in angle of paths to Dec Art + Cafeteria. Another in live oak just E of fountain. Third bird sang from near building N. of bridge. As far as I could tell there are no females in any of these areas.

E. Side Wheeler Hall No Birds! 0730.

NW corner Wheeler Hall - A bird sang twice. A pair here - chasing. Also a pair of fox sparrows. Can hear a bird at SW Corner Wheeler from here.

Between LSB + Calif. Hall - Bird singing from pines N end of field. Flew to flag-pole area, sang from both large trees there. Then went to S. side of field + sang.

16 Mar. Corner Ehlman and Barrow - ♂ bird singing at corner of hedge. A ♀ across street by Art Gallery trilled. ♂ flew to live oak at corner of Art Gallery. Both birds were giving note - ♀ flew across to hedge. Two males, one chasing other, flew across, ~~singing~~ ^{chasing}. One male stopped, sang for several minutes along hedge, by Barrow Lane, in several spots. ♀ continued to trill, but was ignored.

Banks R.C.
1956

Song Sparrow

16.

16 Mar. Eshleman Road S. Eshleman Hall, - Song

Sparrow song here.
Rean Men's Fac. Club. - Bird singing E. of
bridge. Became very alarmed when I
screaked, but I could not find a ♀. ♂
resumed singing in a few minutes.

S. Chem Bldg, at creek bend. Pair of song
sparrows. One picked up nesting material,
went toward dump of iris. Nest seen
in bushes above iris w/o material. ♂ not
singing. 5 minutes, both moved to bushes
at edge of lawn NW corner Women's Fac. Club.
Creek, N. side Men's Fac. Club - NW corner - Pair

song sparrows here, mostly feeding
in heavy brush - honeysuckle, ivy,
acacia, etc. First noticed when in a
trilling chase. May be gathering nest
material. This is S. of creek, N. of Hall
by Fac. Club. Opp. bldg. corner is a trail
to stream. I am on it, birds are 10 ft. W.
One spot here very heavily covered with
droppings. All was quiet for a while,
I squeaked. One bird came to dead end shrub,
sat quietly. (I have moved + am sitting
in rock in stream. He sat there about a
minute, went back toward base of Barbary.

NE Corner Calif. Hall - Bird singing in
live oak. High in tree, at edge of patch
of low junipers.

Bananaft, N. of Barron Lane - Pair of birds
between ledge and ~~vine~~ covered wall, close to
where they meet. Last seen in vines.

S. side Women's Fac. Club - Pair of birds


Banks, R.C.
1956

Song Sparrow

17

Mar 17. Rean Men's Fac Club - Bird with broken tail ~~as~~ left (?) just N of E-W bridge. Scanned from vines, flew to tree, sang once, returned & fed. Flew back to tree (to W about 25 ft, across creek), sang once. Very poor song. 1645 hrs.

19 Mar. E. Wheeler Hall - Heard bird sing twice. Bird in vine on bank, by center of bldg. Another in shrubs. Another pair by NE corner Wheeler.

NW Men's Fac Club, by bridge March - One bird flying from ground. Sat in bush, about a foot from ground (by concrete span over creek). Flew to shrubbery at W end of Fac club.  Seen feeding on feeding along path and in shrubbery to S. of this latter place. Heard bird singing near where I first saw this one. Sang 3 times.

E. Dec Art, NW Cafeteria, by junction of paths - a quiet bird in Tuercus here. Very dense growth around small tree. Went a ways S. when disturbed.

E. Dec Art - (Acacia patch) - bird feeding here. Moved to Tuercus & sang, across path to N.

20 Mar. 2214 Haste St. - Song Sparrows started singing at 0540 this morning.

Corner Ellsworth and Channing - Pair here. ♂ sang from tree, ♀ trilled from bush as I walked by.

Banks, D.C.
1956

Song Sparrow

18.

20 Mar. NE Corner Huront Hall - Bird singing in shrubbery near street corner here. Flew to SW corner Library, continued singing. May have been joined by bird from NW corner Wheeler Hall.

Across Barrow Lane from SE corner Adm Bldg.

Song Sparrow hit in tree occupied by pair of White Crows, Chased. Flew to tree by SW corner Adm Bldg.

N. Side Men's Fac. Club - Pair in heavy brush. One left. The other fed off bushes for quite a while, finally worked itself away from me to W.

Rear Men's Fac Club - ♂ singing as usual near N-S bridge. Can never find another bird here, so believe he is unmated.

NW Women's Faculty Club - bird flew from patch of lilies. Later a bird feeding around edge of lawn, singing weakly occasionally (2 or 3 times) ~~another bird~~. Then two birds feeding in tree.

21 Mar. Dana St, end, bridge W.S. of L.S.B. Pair of birds feeding on bare ground and low plants. First seen W. of bridge, crossed road and fed on E. side of bridge also. No courtship or mating behavior.

Rear Men Faculty Club - Seems like the old boy finally got himself a mate. Two birds very close just W of N-S bridge. Seemed very affectionate. He flew over bridge to his usual perch, sang several times weakly at first, then strong. Also sang from N side of creek, which is unusual. However, the other bird stayed & fed fairly high in the tree, and I lost track of her.

Banks, R.C.
1956

Song Sparrow

19.

21 Mar. NW Women's Fac Club - 2 birds by W side of bldg. Later one by corner of lawn feeding in tree about 15 ft up. It flew S. Soon another, or same, flew up from on or near ground, into tree. This bird fed 20-25 feet up in Umbellularia. Could detect no sign of nesting activity.

21 Mar. Bridge S.W. of LSB - One singing bird on either side of bridge.
S.W. Corner Library - Bird singing here for several minutes. Finally flew to N.E. corner Durant Hall. Sang from at least 2 spots along Durant Hall. Dropped to ground once, momentarily. Could not find his mate.

Creek @ of Union, just W. of bridge - One bird singing, another feeding in *Perrynville* on ground. She would jump on a tall stalk & weight it down. Bird in tree gleaning leaves at end of branch. Both evidently getting insects. After while he became silent, both disappeared.
I went into field S. of creek, one bird feeding in grass.

Pearl Mer's Fac. Club - One bird feeding along walk along Sr. Mer's Hall. When disturbed flew to bushes overhanging stream, sang several weak, incomplete songs. Went to clump of seedlings by small Sequoia, fed on ground by Sr. Mer's Hall, moved to corner of Fac. Club by hedge, right along bldg. With a weak song flew back ~~along~~ along Sr. Mer's. Possibly another bird between walk and stream.

Banks, R.C.
1956

Song Sparrow

20.

27 Mar. Rear NW corner, Veneris Fac. Club - One bird, acting like ♀, in blooming white ~~rose~~ bush, near little statue. When disturbed left quietly, didn't go far, returned quickly. Filled once after return. Must have gone out other side of bush, for I lost her & couldn't find her again.

Rear Men's Fac. Club - Flushed ♀ from ferns along path along walk by Sr. Men's Hall. Almost where I saw her a little while ago. Very quiet. This is almost at head in creek. After moving around small shrubs and ferns for a few minutes got into small tree on other side of path. Fed there, probably on insects (or buds) for 10± minutes. I had been singing in bush by bridge. Maybe approached up the walk, but the two did not get together.

28 Mar. Rear Men's Fac. Club - ♂ singing. ♀ with broken tail on N. side of bridge. Both went to side of bldg., went thru courtship display. ♂ puffed way up, held his head high. The large spot on his white breast really stood out. He hopped around trying always to keep in front of her as she fed & moved about. She sometimes turned away, but always turned back. It looked like a little dance, the way they hopped from one side to the other. Finally they got out of sight behind a bush. ~~At~~ Next I saw them they flew almost straight up, several feet, nearly bill to bill. After they split up, I sang for several minutes, then all was quiet.

M

Banks R.C.
1956

21.

Song Sparrow

28 Mar. Rear Men's Fac Club - ♀, probably same one as before, W. of bridge. Another bird here, not just ♂, who is still singing E of bridge. ♀ got load of dead grasses from Virde creek, flew across to jump of very large leaved plant. Hopped to small stump, back to bushes, back and forth many times. Finally stayed in bushes for a couple minutes, but back to stump with same material. Then about 3 feet away from stump, about 120° as I look from bridge.

Could see

movement in



Perquinkie, and the bird appeared W of the grass. Evidently in early stages, so I won't look for a few days. There is some sort of triangle here, as I noticed a long while back. I'm sure there are 2 ♂, 1 ♀ (w broken tail, altho it doesn't show all the time). She was displayed to by one ♂, but another is nearer during building. It is possible that there is another ♀, and the bridge separates territories, but I can never see more than 3 birds.

VW corner Cafeteria - across ledge - Pair of birds here - ♂ singing on ledge, along walk, I in low bushes by remains of bldg. ♀ constantly gave alarm note while I was in area, but ♂ moved and sang down toward Lee Art. When I moved + sat on bldg. remains, ♀ stopped chirping. In fact, I lost track of her. As I left, she is still there.

Baird, R.C.
1956

Song Sparrow

22.

28 Mar S. End of field N of Heart Gym - Heard a bird sing at SW corner of field. Another, prob. ♀, feeding in shade along edge along S side of field. Went full length of field, seldom left shade, which forms strips about 3' wide. On other end, SW corner, she got into sun some; where shade petered out. Only feeding, no sign of gathering material.

29 Mar. NW corner Cafeteria - ♀ bird in low bushes inside hedge (by old bldg.) ♂ flew in from W side Cafeteria, sat in top of 5 ft bush. ♀ joined him in another part of bush. Both descended to ground, then ♀ flew NE to large tree, chirped constantly. ♂ remained in bush here, also chirping. After 5 min. he flew away to W side Cafeteria. In a couple more minutes ♀ returned, still chirping. Hopped around under & on small bushes, not feeding or anything, just giving alarm note. I moved. ♀ flew to porter of old bldg. ♂ returned to top of bush, sang ^{THU} 5 times, flew toward Dec. Art. ♀ moved while I watched ♂. I approached bush ♀ frequented, she flew from top of bush. ♂ returned to a bush close to her, moved to tall bush, sang once. ♀ moved close to him. Both moved. He went back to singing bush, sang " " times. ♀ on ground giving soft chirps, not alarm, just little "tick"s. I often flys from her favorite bush, which is covered with dead grassy material, a little ways WSW, toward ♂'s singing bush.

29 Mar. N. Side Women's Fac. Club - Pair in courtship behavior. Flew to NE corner bldg in dense brush.

2 Apr. NE Men's Fac. Club - Found a nest with 1 egg. It is in berryvinkle between Men's Fac. Club + stream. See notes for 28 Mar.

NW Women's Fac. Club - Song Sparrow, ♀ 2 thick, near stream. Gradually moved into bushes bordering lawn. ♂ flew in suddenly, attacked her violently, but only momentarily. He then sang once and flew away. She worked on around shrubs bordering lawn. Soon both were feeding close together in an oak tree (not live oak).

Stream W. of bridge between Union + Fac Club - A pair of birds here, act as though it is a territory. ♀ left quietly when I arrived. ♂ flew in to investigate when other birds made a fuss. He sang several times before he left again.

S. Dec Art near corner - Flushed a bird along walk. It or another sang a couple of times. I moved away a few feet, it returned to same place. It seemed to be only feeding.

3 Apr. NW Women's Fac. Club - A bird feeding on ground. Another flew up from bare of small tree surrounded by ivy. Preened, shook, etc. for couple minutes. I examined the place, could find only some grasses which may be beginning of nest. Bird chirped close to me while I was looking. When I left both birds examined the place, then flew off.

mls, R. C.
1956

Melospiza melodia
Song Sparrow

24.

- 3 Apr. Rear Meris Fac. Club 2 eggs in
this nest this morning.
- 4 Apr. Stream N. LSB - Squeaked and 2 birds
flew up from weed patch. Watched them
feed in trees for 15 ± minutes. Found
nest (empty) in the weed patch.
- 6 Apr. Rear Meris Fac. Club, Nest Z - Still 2
eggs today - Set must be complete.
Changed eggs this morning for those
in White Crown nest A. See journal.
- 7 Apr. Rear Meris Fac. Club, Nest Z Did not
see any incubation, or ♀, but ♂
singing in area.
Stream N. LSB Nest Y - 3 eggs in
this nest today.
- 8 Apr. Stream N. LSB Nest Y - still 3 eggs
this morning. Assume the set is
complete.
Rear Meris Fac. Club, Nest Z - ♀ not on
nest.
- 1 mi SE Stinson Beach, Marin Co., Calif
Saw a bird flying about 20 ft high,
suddenly fluttered wings very fast,
butterfly flight, sang in mid air.
The song was fairly typical, but it
surprised me so I almost missed it.
After singing he did a steep glide into
some bushes.
- 10 Apr. Rear Meris Fac. Club, Nest Z - Eggs are
warm. Did not see ♀.
Stream N. LSB, Nest Y - OK. still 3 eggs

Banks, R.C.
1956

Melospiza melodia
Song Sparrow

25.

12 Apr. Rear Main Fac. Club Nest Z - still 2 eggs,
I flushed from nest.

Stream NLSB, Nest Y - no change.

13 Apr. Rear Main Fac. Club, Nest Z - No change at
0900. ♀ flushed from nest.

17 Apr. Bird w/ broken tail seen by NE corner bldg.
Another bird flushed from nest. Nest contains
two young, probably hatched yesterday. When
I sat 20 ft. from nest to observe, adults
gave three types of note - mainly a
high-pitched "tsip", sometimes a lower
pitched "chip", occasionally the more
raspy, typical alarm note. Many
variations on these notes were also heard
and many in between these. Seldom ~~more~~ ^{did}
two notes in a row sound the same.
There seemed to be only one bird, I think
the one flushed from the nest, doing the
singing. See notes under "Exchanges."
After about 10 min., this one moved across
creek close to bldg. and broken tailed bird
appeared. Both were more quiet now,
not chipping so loud or so much, and giving
a more typical hustier note. Finally
one bird approached nest, but I could not
tell which one, or whether it fed. I think it
did. After 35 min. I left.

18 Apr. Stream S LSB, near sheds - Found nest
with 3 young (nest X) in briar tangle.
Young are about 8 days old. Stripes already
beginning to show on head. They crouched
down and were silent when I was near nest.

Bunker
1956

Melospiza melodia

26.

- 18 Apr. Rear Men's Fac. Club, Nest 2 - I'm sitting on bridge (N-S) hidden partly from nest by tree. Adults are not approaching nest. They go into broadleaved plant about 3 ft. from nest, but unless they are so secretive I don't see them they don't go all the way. Later - I am convinced they are visiting nest quite frequently, coming up from underneath after about a 2 ft "underground" passage. Finally saw one bird leave nest. Moved to entrance of Fac. Club kitchen. Here I can watch thru screen, about 6 ft. from nest. Only here a few minutes, but saw an adult at nest.
- Stream N. LSB, Nest Y - Still 3 eggs at 0900.
- Stream S. LSB, Nest X - I returned to this nest at 0915 to band young. As I reached for them they left the nest, and were out of sight before I could catch them. I now believe they were at least 9 days old, possibly even 10. They were fully feathered.
- 19 Apr. Stream N. LSB, Nest Y - Still 3 eggs at 0715.
- Rear Men's Fac. Club, Nest 2 - ♀ (broken tail) flushed from brooding at nest when I approached. I strook in ante-room by kitchen to watch nest. Both birds came and fed young after some hesitation. Did not feed immediately on reaching nest, but didn't wait more than 15-20 seconds. Second bird that fed settled down to brood. After about 5 min. it was disturbed by my talking and flew a few ft.

Banks
1958

Melospiza melodia

27.

19 Apr. Reon Men's Fac. Club, Nest 2 - at 0800
both birds brought food. Neither stayed
at nest after feeding. They are periodically
disturbed by a Calif. Jay who is
gathering food from garbage cans
nearby. It has come twice; both
times the song sparrows gave their high
pitched notes several feet from the nest.
Nest visit at 0810; fed and left.; 1 bird.
Nest visit at 0813; one bird came and
fed, sat on nest to brood. I left.
During my watch these birds approached
nest from same direction, N, downstream,
but did not always use the same route
for their final approach.

20 Apr. Arrived at my post behind screen near
kitchen at 0735. All quiet. Bird entered
general area of nest 0739. Approached nest
and another left nest 0740. Put to nest
fed, removed fecal sac 0741. Other bird
sat in tree until 0742, dropped to
stream side. A bird flew into 2 oaks,
at 0749. Broken-tail bird entered area from
stream at 0753. at nest 0755. Other
bird entered area 0757 and approached
nest immediately, but did not actually
go to it, nor did bird already there leave.
Some activity at nest made leaves move at
0801, I couldn't see what. Bird at stream
at 0807, holding something white + something
green. At nest at 0811. Other bird left
as it approached. If it left it was quietly
and then the weeds.

Watch
2 birds

Banks
1956

Malaysian Malvina

28.

- 20 April Stream N.L.S.B. Nest Y - still 3 eggs,
no change, at 0615.
- 21 Apr. Pearl Men's Fac. Club, Nest Z - Set recording
micro at nest 0703. Both birds in area
until 0709, one (♂, I'm pretty sure),
chipping. ♂(?) brought food at 0716,
moved across stream and sang.
Other bird came to nest 0723.
- 22 Apr. Stream N.L.S.B. Nest Y - 1400 - Young
have hatched, probably this morning.
They are considerably smaller than the
white crown young.
- 23 Apr. Pearl Men's Fac. Club, Nest Z -
Parents chipping in tree. Although I
could see no reason for alarm, I went
directly to kitchen porch, not near nest.
Birds held food in bills, but did not
go near nest for long time. Finally
one approached nest vicinity with food,
but left bushes about 3 ft. from nest
without it. Maybe young have left.
One adult sat in tree giving notes ranging
from the typical raspy call note to a
high pitched ~~ref~~ ^{chirp}, including a "chuck"
of intermediate pitch, and other notes I
cannot describe.
- 24 Apr. Stream N.L.S.B. Nest Y - Young very
small. Raise and beg when I touch
nest.

Banks
1956

Melospiza melodia

29.

25 Apr. Stream N LSB Nest Y - Three young, all raised heads and gaped when I put hand on nest. Mouth is red, lined with yellow, but not as red as White-crowns. There are two light spots on the end of the tongue. One I picked out of the nest was active in my hand, stretching wings, trying to move. Feather quills on wings are out 3-4 mm., and are beginning to show on other parts of the body. There was no sound that I could hear.

Rear Mer's Fac Club, Nest Z - This nest destroyed and young gone. Can see a trail through the area, going out the opposite way that I go, some fairly large animal. Adults chipping nearby.

27 Apr. Stream S LSB Area of Nest X - Adult bird flew into area with food (little green worm-like objects) in mouth. Hopped around and occasionally into weed patch, but retained food. Flew away once, but returned with the food still in its beak. Finally after much hesitation it went into weed patch which had held Nest X, returned without food. Sat on a dead Umbelliferae, wiped bill on both sides on plant. Seemed to be wiping off excess food, or somehow cleaning around edge of bill.

28 Apr. Stream N LSB Nest X - Tried recording nestlings from truck. They make so little noise it probably didn't pick up.

Banks
1956

Melospiza melodia

30.

- 30 Apr. Stream NLSB, Nest T - This nest destroyed when I looked at 0725. Adults not around, so I assume it was destroyed Sat. or Sun. Nest is pretty well torn up.
- 7 May Bridge E. of Union - Pair of birds chipping and giving alarm notes similar to those given when nest is bothered. Around some white-barked Aces, in dense Berberis, S. side of bridge.
- Rear Men's Fac. Club - No birds in evidence in this area this morning.
- N side Men's Fac Club - Heard a bird sing twice, saw one descend to ground from Berberis. It was the bird with the broken tail. It went across walk from stream side to area in front of building.
- 8 May Watched the birds for nearly $\frac{3}{4}$ hour this morning. Finally flushed & just a few feet in the honeysuckle, opp. the corner of the building. Could not find nest but expect to soon.
- 11 May Could not flush bird from the area where I thought nest was located. Both birds were in sight when I first arrived, and on second visit. On third visit ♂ was singing downstream, but I didn't flush.
- 12 May After an hour of watching & looking I finally found nest about a foot off ground in honeysuckle (Lonicera). It contains 5 eggs. This is Nest W.

31.

1715 hrs. Now there are 4 young and only one egg left. Weighed and clipped-nails of the four. They tried to move on the pans of the balance but couldn't get far. Only one could move very much. This was the smallest. They all crawled in my hand. Maybe the smoothness of the balance pan was the factor. They could not right themselves when on their backs. They did not sit up but rested on feet and wings (wings) in "egg position" (See Blanchard, 1941) with neck outstretched. Eyes not open.

15 May Pear LS3 - Bird with grass in
mouth in briar patch near stream. ♂
sang nearby. Then both of them came
to same spot in briars. She is gathering
material from a willow tree nearby -
long strands of something. She isn't really
flying back & forth, but sort of fluttering.

Banks
1956

Melospiza melodia

32.

15 May NW corner Men's Fac Club West W - Weighed these birds at a little after 1700 hrs. The last egg has hatched. The eyes of the ~~you~~ older ones are beginning to open just a crack. The feather tracts showing darker but are not coming through yet. Still no sound that I could hear. There is not much if any change in appearance since yesterday. The birds didn't beg as much when I touch nest. They did not all beg at once.

16 May S. LSB near road - ♂ Song sparrow singing. Dropped to ground and ran a few feet with wings outstretched.

NW corner Men's Fac Club West W - Weighed the birds about 1745 hrs. Eyes are open a little (15mm?) Primaries are out about 1mm except in the smallest + youngest. Saw ~~the~~ an animal turn + make a hasty retreat while I was at the nest. Expect to find it destroyed.

17 May. Still OK this morning.

LSB. along stream - Have been trying to relocate this pair (had nest X). Yesterday the weeds where X was located were cut. This morning the ♂ was singing and there seemed to be some courtship activities. Possibly their second nest was destroyed. Will watch them in a few days.

Rear LSB. There is definitely a nest in the brush patch between parking lot + stream. Did not find it but am positive from actions of ♀. When I find it it will be V.

Melospiza melodia

Banks
1956

Nest w.
L4

~~none~~
5

| | 14 May | 15M | 16M | 17M | 18M | 19M | 20M | 21M | 22M |
|---|--------|--------|-----|-----|------|-------|--------|--------|--------|
| 1 | 3.0 gm | 4.7 | 6.7 | 9.0 | 11.2 | 29.1 | 30.7 | 36.2 | 36.8 |
| 2 | 2.7 gm | 3.7 | 5.7 | 8.1 | 10.2 | 29.3 | 30.8 | 31.5 | 31.8 |
| 3 | 3.1 gm | 4.7 | 6.5 | 9.1 | 12.3 | 30.3 | 31.7 | 32.7 | 33.2 |
| 4 | 2.4 gm | 3.3 | 5.1 | 7.3 | 9.7 | 28.9 | 30.8 | 31.1 | 31.7 |
| 5 | — | gm 2.3 | 3.7 | 5.7 | 7.0 | 26.1 | 28.8 | 30.3 | 32.3 |
| | | | | | | (9.7) | (12.4) | (13.9) | (15.9) |

16.4
female.

12 right and left

11 right

15 overpood, right

13 left

14 left and right

1956

Melospiza Melodia

33a

NK Corner Men's Faculty Club, West W

| DATE | MAAY | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | TOTAL | \bar{x} |
|----------------|------|-----|-----|------|------|------|------|------|------|-------------------------|--|
| CLIPPED | 14 | | | | | | | | | | |
| R4 | 3.0 | 4.7 | 6.7 | 9.0 | 11.2 | 13.3 | 14.3 | 14.8 | 15.4 | | |
| R3 | 2.7 | 3.7 | 5.7 | 8.1 | 10.2 | 12.9 | 14.4 | 15.1 | 15.4 | | |
| R2 | 3.1 | 4.7 | 6.5 | 9.1 | 12.3 | 13.9 | 15.3 | 16.3 | 16.8 | | |
| L4 | 2.4 | 3.3 | 5.1 | 7.3 | 9.7 | 12.5 | 14.4 | 14.7 | 15.3 | | |
| — | — | 2.3 | 3.7 | 5.3 | 7.0 | 9.7 | 12.4 | 13.9 | 15.9 | | |
| Gain R4 | | 1.7 | 2.0 | 2.3 | 2.2 | 2.1 | 1.0 | .5 | .6 | 13.4
12.4 | $\div 8$
1.55 |
| Gain R3 | | 1.0 | 2.0 | 2.4 | 2.1 | 2.7 | 1.5 | .8 | .3 | 12.8 | 1.6 |
| Gain R2 | | 1.6 | 1.8 | 2.6 | 3.2 | 1.6 | 1.4 | 1.0 | .5 | 13.7 | 1.7 |
| Gain L4 | | .9 | 1.8 | 2.2 | 2.4 | 2.8 | 1.9 | .3 | .6 | 12.9 | 1.6 |
| Gain | | | 1.4 | 1.6 | 1.7 | 2.7 | 2.7 | 1.5 | 2.0 | 13.6 | $\div 7$
1.94 |
| Gain \bar{x} | | 1.3 | 1.8 | 2.22 | 2.32 | 2.38 | 1.7 | .8 | .8 | 13.06 | $\div 5$ 1.68
$\div 8$ 1.66
= 1.67 |

Banks
1956

Melospiza melodia

35.

- 19 May NW Corner Man's Face Club, Nest W
Weighed these young ones again about 1800 hrs.
Only one begged, the youngest. One other gaped
once. The rest crouched. Once or twice one
gave a note - it seems to be either a
single note or an extremely rapid series,
probably the first. It sounds more like a
food begging note than a fear note, but
the one that gave it wasn't begging. It
may be a "hurt" note, and I may have
been pressing its leg. Primary sheaths
on the little one are out about 5 mm, on
the others about 12 mm. The larger ones
have their feathers almost out, on the
wings, and broken through on other
parts of the body. They are more
active in the weighing rack than the
white crowns. The little one's eyes
are barely open, and he keeps them closed
whereas the others are kept wide open.
- 20 May Visited nest + weighed about 1730 hrs.
Primaries still not out of sheaths, but
on older birds, back + flank feathers are
out. Only youngest bird (no mark) begged
today. None are as active in my hand
as previously. Notes given while I am
at nest do not seem to alarm parents. Not
a great weight increase today.
- 21 May Weighed about 1715. No gaping, all
crouched and ~~was~~ still. Only gave sounds once.
Doesn't sound like White Crown. Feathers well out
of sheaths, esp. on back. Little one still large.
All active in hand, burrowed into rock.

Banks
1956

Melospiza melodia

36.

21 May WLSB, Nest V - Three eggs this morning, no sign of adults.

22 May NW Corner Fac Club, Nest W - Weighed and banded these birds at 1730 hrs.

The birds are very active in my hands, but made no effort to fly away. They didn't like to be held, but sat quietly.

By banding they become: R-3 = S-1

L 4 = S-2

R 4 = S-3

→ = S-4

R 2 = S-5

Not much change from yesterday except that feather development has progressed some. Light stripes on crown and over eyes are beginning to become definite. All defecated in my hand or in the rock.

23 May All birds out of the nest at 0745. Parents chipping in the area but I didn't see them go into brush as if to feed.

West LSB, Nest V - Flushed ♀ from nest this morning. Still 3 eggs.

28 May 1 young and two eggs this morning. The young bird appears rather large and 2+ days old, but I didn't take from nest. Will check and weigh later.

NW Mar's Fac. Club, area of W - No sign of any birds. Something has mashed down a good bit of the honeysuckle in the area. No chipping adults in area.

Banks
1956

Melospiza melodia

1 Jun W Men's Fac Club area of V - Heard
a bird singing. It turned out to be
the one with the broken tail. She sang
4 times. Did not seem too alarmed at
my presence. Went into bushes and
was quiet.

WLSB, Nest V - Nest is empty today
except for a few pieces of eggshell.



Baird
1956

Exchanges.

~~Exchange~~ 1 - White Crown A to Song Z.

17 April. Z - See notes under Song Sparrow for this date - Both parents present, ♀ with food, but hesitant about going to nest, I assume because of my presence 20 ± ft. away. Finally one bird approached nest, apparently fed, flew away rapidly. Immediately one perched somewhere over my shoulder + sang once, moved and in about ½ minute sang again. After this both birds seemed reluctant to go to nest again, and after 35 minutes watch I left. (0725 - 0800)

18 Apr. Z - Young still with down covering. Eyes just barely open a slit. Feather tract down middle of back can be seen. Do not appear to be suffering any from the exchange. This must be the third day.

19 Apr. Z - Eye slit maybe 3 mm. Primary feather sheaths out of skin about 5 mm, others on body barely through skin. Raise up and squeek very faintly when I approached nest. No disturbance when I picked one out of nest.

20 Apr. Z - These are at exactly same stage in development as Nest B was on 19 Apr. Young gaping when I put hand by nest. Picked one out, no grasping, sat quietly up & round in my hand. Gave protest noise when I lifted ~~it~~ to return it to nest.

Banks
1956

Exchanges

exchange 1 - White Crown A to Song Sparrow Z

22 April - Z - Not much farther advanced.

~~23 Apr. Z~~ - Banded at 1600 hrs. Gave protest note when banded, and also opened mouth wide without saying anything.

23 Apr. Z - Both birds still in nest. One may be a little older than other.

Beginning to show a white (or light) stripe down center of head. More noticeable on one than other.

24 Apr. Z - Still in nest at 0800. White head stripe shows up very well. Nearly fully feathered.

25 Apr. Z - Young gone, nest + area destroyed.

Banks
1957

Melospiza melodia

1.

16 Feb. 1957

Upper Sec. Ath. Field, Bancroft, near U.C., Berkeley

One bird singing about center of this section, on wire atop wall. Flew into bushes along wall and continued to sing from top of a bush. Can faintly hear another singing somewhere behind Methodist Church. The bird in this area may well be the one seen here regularly for the past few weeks, mostly nearer corner. No evidence of a mate.

Opposite Pelican Building, Campus, Berkeley
A bird singing on ledge here.

9 March 1957

U.C. Campus:

Saw song sparrows this morning at these places:

Parking lot on Bancroft next to Unitarian Church.

Near Pelican bldg.

House S of Conell Hospital on College Rd.

SE corner Women's Fac. Club.

Front of President's home

Did not try to observe any of them carefully.

16 March

Near Pres. home, U.C. Campus, Berkeley

A bird singing here at 5:15 P.M., at E. side of bldg. Another along Rd. to S. of house, by wide spot. Singing in low growth near privet hedge.

Wooden bridge E. of Gionami Hall, Campus, Berkeley, Calif.

A bird sang from bush directly opposite the E. end of this bush bridge. Another bird was feeding a short distance away on the ground, in the same patch of bushes. After 1 song, both were feeding. A few minutes later 1 sang from S. along W. side of creek.

Banks
1957

Melospiza melodia

2.

16 March 57

Wooden Bridge E of Giovanni Hall, Berkeley

~~and~~ Could only see 1 feeding in original area then, and there were no answering calls. In a couple minutes we called from other side of original area - shortly answered by bird on W. side of creek. A little competitive singing now. — Saw 3 birds on ground in original area. Two flew away in a chase - remaining one was a Song Sparrow. Did not get to identify the ones that flew. Believe there may be 2 males in this area.

18 March

NE corner Durant + Ellsworth, Berkeley.

Saw a song sparrow here, along Ellsworth.

It was chased by a White Crown. Later heard one singing around E. side of house.

Bridge SW. of LSB, near road

A bird singing from S side of bridge flew to N side + continued singing when I walked by. Sang at least 2 different songs. I walked N along creek; he flew back S.

1st bend in creek N of bridge, near Naval Bldg.

Saw 2 (± think) other birds feeding here. Not close to each other; No sign of gathering nest material.

Downstream, at 1st bend to South.

A bird singing at far end (S. end) of S running part of stream, in area of Wildbump. Flow. Rasp. Another closer, bathed in stream. Flew to bush overhanging stream, preened under both wings alternately, w/ much shaking. It flew to another ~~tree~~ shrub upstream (E) + preened more, then to N. to edge of Eucalyptus grove. One singing stopped meantime.

Banks
1957

Melospiza melodia

3.

~~26~~²⁷ March

Bridge SW of LSB — at N side of bridge, heard a bird sing + another trill. Both were in bases of Eucalyptus trees. Singing bird I assume ♂, trilling ♀. When ♂ sang, ♀ trilled. ♂ would fly toward her with tail fanned. Then he would retreat + sing, + she would trill. The procedure repeated several times. She stayed low in bushes, could not see her always. He flew to live oak nearer LSB, sang. Then he went to S side of bridge + sang. Heard trills there, not on N side — she must have moved also. A third bird during all this was in a nearby tree, active, giving normal call notes as well as weak, thin chirps. Assume ~~he~~^{it} is ♂. Must be just on edge of territory.

Downstream from last locality

A pair down here, also in the singing-trilling routine. Main activity in and around a clump of Purple Flowering Raspberry, somewhat ~~lower~~ along stream on either side, esp. downstream. The downstream part of their activity must be at a territory boundary. As they flew upstream in a chase, another pair appeared from downstream, and then the first pair came back. There were at least 3, probably 4 birds feeding very close — a foot or so at times, but no fighting. Occasionally the upstream bird would fly into lower branches of tree + sing. Didn't hear other bird sing until first bird had gone back upstream. The area of overlap is by a little waterfall.

Banks
1957

Melospiza melodia

4.

27 March

Stream N of USB

Most of the brush is cut down along here this year, but there was a singing bird near the bend opp. E end USB.

29 March

Walk W of Men Fac. Club

A bird singing in live oaks bordering this walk, but I can find no ♀ for him.

Rear Men's Fac. Club

A bird here singing first about 20' up in tree W of bridge, then once E of bridge, then between Fac Bldg + Sr. Men Hall. Also saw bird on walk in latter place while bird was singing in first place. I moved past both bldgs. to S. Had one bird singing above me, one where I had been. Also saw a pair courting on ridge of Sr. Men Hall, and feeding in large Black Oak there. At least 2 pr. in area here, maybe $2\frac{1}{2}$ or 3. While writing spotted 2 birds on walk to N of me. Flew ~~down~~ toward Men Fac Dining Hall + Kitchen. These two fed (?) by hedge here, then flew E. Heard a sing once after they flew. Saw them feeding on walk along N side Sr Men Hall.

E end Pelican Bldg.

Singing bird here.

1 April

Pitto.

Rear Men's Faculty Club

Bird singing in small garden with bird bath. Only bird seen in this whole area. 0800.

Banks
1957

Melospiza melodia

5.

2 April

Bridge S. of LSB, Campus

Two fighting birds. First seen engaged in a chase! Then they met head on, evidently grasped bills and rose into the air. They repeated this, falling to the ground, where they lay ~~off~~ for a couple seconds, still clutching with bills and possibly with feet. Then into air a few feet again, falling back to ground, still together, laying on sides with wings stretched. When in air, beat each other with wings. Finally separated, flew a few feet apart. (This is ~~the~~^{by} end of bridge). One sang weakly, flew E across bridge. Other sang more strongly. Then first flew back, both flew ~~W~~ about 30 ft. When flying used a peculiar, very fast fluttering wingbeat. Flew back to starting area, sat about a foot apart. One mounted small bush, sang several times - song is very weak & high pitched. Other sang from his place farther W (after flying back) song normal ^{pitch} but weak. Bird flew back E across bridge. Probably a territorial struggle.

Stream S. of LSB

A singing bird, probably ~~the~~ strong singing one from above note, singing across stream from shed. Was very disturbed while I was in the area. It flew upstream toward bridge & kept on singing. ♀ flew up toward him from willows, in a minute returned to center of willow clump. Found nest, 2 young several days old, and one egg. Call it Z.

Banks
1957

Melospiza melodia

6.

2 April

Stream S of LSB - Nest Z.

Weight of toe-clipped bird - 10.9 gm. Prim. ^{5.5} 5 mm
" " other " - 9.5 gm. " 4 mm

Primaries are out on these birds to the extent shown. These data for 1815 hrs. The first one, clipped on left third toe, clung to the nest when I pulled it out of the nest. The other didn't that I noticed. Crawled very actively in my hand, and could remain erect very well. Eyes are not open. This nest is 3 ft above ground, and is tilted about 45° , so both birds are in one edge.

3 April

Clipped bird - 10.4 gm, Prim. 8 mm.

Unmarked " - 9.0 gm., " 5 mm.

0645. Eyes of larger bird open barely. Feathers are out over all tracts except the anteriormost part of the head. All are out a minimum of 2 mm. (estimated, not measured). None have broken sheaths yet. Much down still on bodies. Both birds ~~clung~~ ^{clung} to nest as I removed them. No defecation noticed. Both birds active on balance. No gaping observed, no sounds. Apparently have developed fear reaction already.

Stream N of LSB, E part

There is a singing bird around the bend of this stream, has been for a long while. I looked all over today, cannot find another bird, i.e. a mate, or any sign of nesting activity. I poked around all bushes + weeds, could arouse no excitement from him, could not scare up another bird.

Banks
1957

Melospiza melodia

7.

3 April

Upstream from bridge W of LSB

A singing bird in Eucalypt. just S of bridge. Much apparently adequate nesting cover. But as I looked thru it I did not flush a ♀ or arouse the ♂ at all. No excitement like I was even getting close.

Stream W of LSB, at Fork, Nest Y

Found this nest at 0830, 4 eggs. It is in clump of bushes on S. Fork of stream, S. Bank. It is in Rubus and Dogwood + Vetch (?) Height about 34",

E of University loop

Between road + stream, in bushes, a sparrow acting very disturbed, could not locate nest.

Stream S of LSB, Nest Z

| | |
|--------------------------------|-------------|
| Marked - 13.0 gm. Prim. 11 mm. | } 1830 hrs. |
| Unmarked. 11.2 gm. Prim. 8 mm. | |

These birds cling to nest very tenaciously. Eyes are slightly open. Lay quietly on balance, but try to crawl in my hand. Extra egg still in nest.

Fork of stream W of LSB, Nest X

This nest is empty, but otherwise undisturbed at 1825 hrs. No sign of adult birds, there was a pair of Stellar jays in the area this morning - probably they took eggs. 4 Apr

4 April

Stream S. of LSB, Nest Z

| | | | |
|----------|----------|--------------|--------|
| Marked | 11.7 gm. | Prim. 13 mm. | } 0645 |
| Unmarked | 10.6 gm. | Prim. 9 mm. | |

The unmarked bird stood in my hand and beat its wings strongly. Both crouched low in the nest as I reached in, both held on to nest with feet. Marked bird defecated while I was holding it, before weighing.

Banks
1957

Melospiza melodia

8.

4 April.

Between Pelican Bldg. + Eschmann Hall

A bird was singing from several spots in this area, as well as E of Pelican Bldg. There is a huge thick bank of bushes along the stream here - an impenetrable jungle. I nosed around for quite a while, aroused no excitement ~~and~~ flushed no ♀.

Stream S. of L.S.B., Nest 2

Marked - 15.2 gm., Prim. 14 mm.

Unmarked - 12.3 gm., Prim. 10 mm.

The ~~marked~~ larger bird this morning was beginning to break feathers out of sheaths. ~~Primary~~ Secondaries had tufts of down on end of feathers - Maybe coming out of sheaths.

1745: Marked bird - flank feathers out of sheaths 1 mm., light tan. Secondary coverts almost, and some back feathers. 1 Primary covert out, some on leg. Unmarked bird - A few back feathers just barely out. Eyes of both are well open. Both clutch my hand, cling tenaciously to nest.

5 April.

Unmarked 12-12½ mm Prim. 12.3 gm.

AM

Flank feathers out of sheaths, as are those on middle back²⁻³ mm. Secondary coverts mostly out up to 1 mm. Gave very harsh fright notes when lifted from nest. Operated in my hand, reweighed. Weight 11.8

Marked - 13.6 gm. Prim. 16 mm (some 15)

Neck feathers coming out. Primaries sheaths broken on end. Most all back & flank feathers out. Chute out 2-3 mm. Secondary coverts + all proximal wing feathers out. Gaped once in my hand. Very quiet in hand, but shivered. - from fright or cold?

5 April.

W. side Wheeler Hall -

Investigated Lee + N side for nest of bird singing at NW corner. No luck.

E side Wheeler Hall

Bird singing around here. Squeaking in area produced a pair of sparrows, one of which appeared to have food in its mouth. While searching the bushes found what may be the start of a nest - not sure, also not sure it is this species or Spotted Towhee also in area. Aroused no ♀ in bushes, but ♂ one time approached me + sang a little extra violently.

Stream E of Union, opp. Fountain

Saw a bird - a quiet one - along stream a little E of here. In dense clump of bushes Lee - Rubus, & other stuff, found an empty nest - this year's I think. Looks large for song sparrow but maybe not. No birds around while I was at nest.

Stream E of Union, E small bridge.

From here can hear a bird both upstream + downstream. Downstream, an excited bird (♀?) by large bush (small tree) overhanging stream. ♂ flew to this area + sang. Upstream bird is close to walk (N-S walk) W of Men's Fac, Club. (Probably one noted several days ago.) With heavy brush + steep bank, must give up hope of finding downstream nest.

Banks
1957

Melospiza melodia

10.

5 April

NW corner Men's Fac. Club

Found a nest - probably incomplete, maybe last year's. Close to nest W of last year. Also a singing bird close by.

E of Men's Fac. Club

Upstream slightly from bridge, a pair, I think, acting very disturbed.

Stream S of LSB West Z

| | | | |
|----------|----------|--------------|-------------|
| Marked | 15.6 gm. | Prim 18 mm | } 1745 hrs. |
| Unmarked | 14.1 gm. | Prim. 14 mm. | |

Marked - 4 Primaries (1, 2, 3, 5) out of sheaths. Rectrices just barely broken. Some of head not out. Other than that, all feathers out + show light tips + dark feathers, esp. wing. Sits very still in my hand, but active on balance. Gaped when replaced in nest.

Unmarked - Out a few back feathers out, and flank + leg feathers out of sheaths. On wing, only secondary coverts out.

6 April

Marked - 14.3 gm. Prim. 20 mm.

9th + 1st Prim still in sheath. Central rectrices out. Few head feathers out, most others are. On left wing, only 9th prim in yet. Gave several protest notes in my hand.

Unmarked - 13.4 gm. Prim. 17 mm.

Most back + upper wing feathers out. Flank + ventral feathers out (both birds). 2, 3, 5, 7 primaries out. 0645 hrs.

Banks
1957

Melospiza melodia

11.

6 April

Stream S, LSB, Nest 2

Marked 16.0 gm. Prim. 21mm, out 6mm. 1750hrs.
All feathers out except those of head, Rectrices
barely out. Gaped in my hand, held firmly to
my finger + sat quietly. Turned head toward me
and gaped. Kept head pulled in + gaped,
~~the same~~ Inset on balance.

Unmarked. 15.2 gm. Prim. 18 mm out 1.5 mm.
right
9, 8, 6 primaries not out of sheath, 9, 8, 7, 5 on
left not out. Primary coverts not out. - Gave
protest note as I lifted it from my hand to
balance. Gaped in my hand, also. Clung
tightly to my hand - hard to put down (both birds).

7 April

0630 Marked 14.6 gm. Prim. 24mm, out 5mm.
All feathers have broken thru sheath, but
there is still much down attached.
St. Sheaths still observable plainly on flight
feathers, all gone on others. (Seen on coverts).
Banded this bird, which gaped in my hand,
rt. leg, joint, band # 24/180301

Unmarked 13.7 gm. Prim. 20mm, out 0-3mm.
Head feathers not as far as above - sheaths
still evident here. Prim. 9, 8 on right not
out, 9, 8, 7 on left. Primary coverts not
out. Banded # 24/180302 on left leg.
This nest was at 90° or more when I got
there this morning, presumably from the heavy
winds last night. I set it horizontal.

Both birds were in nest, don't see how.
They were clinging tightly, almost upside down.
Both gaped a lot this morning. Probably
had not been fed yet today. These
birds are about to leave nest. Marked

Banks
1957

Melospiza melodia

12.

7 April

Stream S of USB, Nest 2.

bird, when in balance box, sat on just his feet. other bird still sits on ~~to~~ whole tarsus. Both birds sat on edge of nest after being replaced.

1800hrs

Rt. 16.8 gm. Prim. 26 mm, out 6 mm. All prim. out about same. Rectrices out 3 mm. All out but a few on point of head, by bill.

Left 16.0 gm. Prim. 22 mm, out 2-6 mm. 8th Prim. barely out of sheath. Fewer head feathers out than on other bird. This one ~~to~~ left the nest, hopped several feet away on ground when I took other one out of nest. Both gaped in hand, but were quiet in hand + on balance.

8 April

0630 Right 15.4 gm. Prim. 27.

Crown stripe shows light on dark crown.

Stretchings show on upper breast. Jumped from my hand with loud notes, but I retrieved him. Defecated in the process (He).

Left 14.2. Fewer forehead feathers out than on other. Stripe on head barely shows. Defecated before weighing.

Put both birds in nest together, but don't know how long they'll stay.

NW Corner Men Fox Club

Nest found here 5 Apr. is empty yet. Dead leaves in bottom probably indicate it is an old one. Still a singing bird close by.

Banks
1957

Melospiza melodia

13,

8 April

Bridge E of Men's Fac. Club.

Heard a singing bird. Another bird flew in to brush along S side of stream with much twittering, which turned to alarm notes. This one had grass (?) in bill, crosswise. Flew around, hopped on stones, carried on quite a delaying action. Finally flew into ivy on N bank of stream on E side of bridge, near a very slender twig like bush. Flew back to brush on S side creek then off toward Say Men's Hall. Returned with another load a few minutes later & went thru the same procedure. Nest is here on N bank.

S. of Naval Research Bldg. Nest X

Watched birds carrying food for about 45 min. Went all around but not to nest. ~~Once~~ Once one went to it, but I couldn't find it. Finally found it at 0930. It is by stumps, in Rubus. Young are several days old, 1880 hrs. WT. 15.5 gm. Prim. 15 mm.

Ventral & flank feathers out of sheath, as are most on humerus. Some secondary coverts & many back feathers out. Gave protest notes.

Plain 14.8 gm. 15 mm Prim

All but 1st & last prim. out of sheath, a wee bit humerus, ~~some~~ ^{few} back, ~~a few~~ ^{most} flank, most ventral feathers out. All greater secondary coverts out.

Left 12.0 gm. Prim. 12 mm.

Few back, most ventral, some flank feathers out. No wing feathers out. Definitely behind others.

Banks
1957

Melospiza melodia

14.

9 April

S. of Naval Research Nest X

Left, 10.8 gm. Prim. 12 mm.

Gaped, stretched very up in nest. Gave protest notes when taken from nest.

Some secondary coverts have barely broken thru. Otherwise no different from last night. A few faint notes given in my hand.

Defecated before weighing.

Plain. 12.4 gm. Prim. 16 mm.

All but 9th + primary at least broken, but 1st barely. All but 15th right broken. A couple head feathers out.

Left 13.5 gm. Prim. 16 mm.

Rt. prim. 1-3 are out, left prim. 2, 4, 5, 8

are out, if just barely. Gaped + squeaked in my hand. A few crown feathers just out. Most back + ventral feathers.

All birds gaped while I was holding them, all held tightly to the nest, and all clung tightly to my finger.

Time 0620-0640.

Stream S. of L.S.B., Nest Z

This nest empty at 0655. Young probably left yesterday.

E Side Bureau of Orr.

As I walked by group of low shrubs + ivy, birds were disturbed in the ivy on the ground. Were very disturbed as I looked around in ivy, crawling into bushes. For about 5 min. they stayed, chipping, typical anxiety action, finally at least one flew over bldg. to W. Now, 2 min + later, both are in bushes again but very quiet.

Banks
1957

Melospiza melodia

15.

9 April

S. of Naval Research, Nest X

1745 hrs.

Left. 13.2 gm. Prim. 16 mm.

Gaped in my hand. Prim. 9, 8, 7, 1 not out of sheath yet. 9+1 on left not out, 8+7 barely broken. Coverts except primary out, alula out. Most rectrices barely broken thru. A few head feathers broken thru.

Right. 15.4 gm. Prim. 19 mm.

A number of head feathers out. All primaries at least broken on end. 3 Prim., coverts (greater) broken. Most back feathers out. Defecated before weighing.

Plain. 14.4 gm. Prim. 19 mm.

All primaries broken, at 9th least & barely. A few head feathers out. Intermediate between others, closer to Right, which is most developed.

Nest is 18" off ground, 9" from tree horizontally.

10 April

0615: Left 12.0 gm. Prim. 17 mm.

Neither 9th primary broken, but almost. A few head feathers out. Most back feathers out, those on upper back least.

Plain 13.7 gm. Prim. 21 mm.

Rt. 9th Prim. not out of sheath. Back well feathered. Head feathers, a few, out. Ventral apteria nearly covered.

Right 14.6 gm. Prim. 21 mm.

All prim. broken out, at 9th least. Back well feathered, many head feathers have begun. Ventral apteria nearly covered.

All birds, esp. Right, gaped & begged in hand. All also gave protest notes. Stand on entire tarsus.

Banks
1957

Melospiza melodia

16.

10 April.

SW part Men's Fair Bluffs:

A pair of birds here - 1st time I've seen 2. Both apparently feeding in fern patch. ♂ went to live oak in ferns & sang. ♀ flew up, then to ground with a fluttering flight.

E Men's Fair Club, West W

One egg in this nest today. The nest is 12" from ground (where ground is lowest, 2 1/2" across cup, cup 2" deep. The egg is rather odd - about 1/3, large end, is very light. Then there is a narrow band of dark, the rest, about 1/2 toward small end, a lighter brown. No spots on egg. Marked it "1".

S. Naval Research Nest X

815

Left. 14.4 gm. Prim. 19 mm.

All primary sheaths broken, 9th barely. Most coverts out or broken. Sits on whole tarsus.

Right. 16.7 gm. Prim. 22 mm.

Crown feathers really blossomed! Most all out except most anterior ones. Crown stripe shows well. Most primaries at least 8 mm out of sheath. Sheaths little evident over most of head.

Plain - 15.7 gm. Prim. 22 mm

Head stripe beginning to show up.

Primaries 2-7 mm out of sheath. Few sheaths evident, i.e. other feathers cover them.

All birds still stand on entire tarsometatarsus, not on feet. Quite frequently a bird will gape when I stretch his right wing out to measure the primaries.

Banks
(1957)

Melospiza melodia

17

11 April

S. of Naval Research, Nest X

Plain, 14.0 gm. Prim. ~~24~~²⁴, out 4-13 mm.

0615 hrs.

Body well feathered. Pre-eye feathers on crown not yet out. Much down remaining. Peeped, then gave protest note when pulled from nest.

Banded ~~24/180305~~^{24/180305} on right leg.

Left, 13.2 gm. Prim. 20, out 2-5 mm.

Gave series of protest notes when taken from nest, again when taken from balance. Really disturbed parents.

Very few crown feathers thru sheaths, and wing feather sheaths are still prominent.

Back well feathered. Banded

24/180306

~~24/180306~~ on left leg. Defecated during banding, new out, 12, 7 w/ band.

Right, 15.2 gm. Prim. 24 out 7-13 mm.

Crown stripe well developed. All crown feathers have at least broken thru sheaths, some not far. Sheaths not evident on body or wing feathers.

Banded 24/180307 on right leg.

Left toe clipped bird by far most active. Right least active.

E. of Men's Fac. Club, Nest W

Another egg now, this one normal. Marked 2.

S. of Naval Research, Nest X

1845 hrs. Right, 17.2 gm. Prim. 25 mm. out 15,

all feathers except a very few on crown appear completely out. Few are in sheaths, but broken.

Stripes on throat & breast plain. Head stripe plain. Sits on feet. Put black band on left leg.



Banks
1957

Melospiza melodia

18

11 April

S. of Naval Research, Nest X

Plain. 16.3 gm. Prim. 25, out up to 13 mm.

Defecated new weight 15.2, Crown stripe plain, as are stripes on throat & breast.

Most all feathers, even on head, out of sheath. Put white band on left leg. Continually gave high pitched "pip" while in my hand. Sat on my finger, almost tried to walk off. Another small defecation, not enclosed in sac.

Left. 15.3 gm. Prim. 22 mm, out 4-9.

Crown stripe fairly plain, but quite a few anterior feathers still in sheaths. Breast stripes fairly plain. Many feathers still restricted by sheath. ~~Sat~~ on whole tarsus. Black band on right leg.

When I put bird "left" back, bird "~~black~~ right" had got out of nest. I tried unsuccessfully to get him, but he got several feet from nest in briars. This was 1805 hrs.

12 April

0830. Still 2 birds in the nest, not particularly jumpy. Crouched low in nest.

E. of Men's Fac. Club, Nest W

10:00 The third egg is here, I marked it 3.

S. of Naval Research, Nest X

At 1630 hrs. one bird, "Left" (black band on right leg) was only one left in nest.

Its crown stripe was fully developed - I didn't look farther.

13 April

SW Corner Harland Hall

Along Sparrow territory here. Carrying food to a nest in low non-thorny shrubs. Couldn't find nest.

Banks
(1957)

Melospiza melodia

19.

13 Apr.

E of Men's Fac. Club, Nest W
Still 3 eggs, ♀ incubating.

15 Apr.

NE Corner Wheeler Hall

Searched here for some time for a nest, but could find nothing. Spotted Towhees certainly gave evidence of having one, Song Sparrow ~~nest~~ weren't particularly disturbed. Also no luck at Bureau of Acc. area, which belongs to same pair, I'm sure.

N side Men's Fac Bldg.

Looked here for $\frac{1}{2}$ hr. at least. The ♀ bird is one with a broken tail - i.e. feathers twisted off to one side. Probably same "broken-tailed ♀" as last year was in this area. I think the nest is low on the bank, near the stream ~~but~~ than ~~the~~ walk, but cannot find it.

19 April

E of Men's Fac. Club, Nest W
♀ still incubating 3 eggs.

22 April

No change. 3 eggs. ♀ flushed off nest.
N side Men's Fac. Bldg.

Searched once more for this nest, where I saw the broken-tailed bird. No luck.

23 April

E of Men's Fac. Club, Nest W

No change - still 3 unpipped eggs. 0700

1145- Egg 2 is hatched, young bird weighs 1.9 gm.
Marked him R-1. Raven is not shy - he is only a few hrs. old. Egg 3 is well along toward hatching.

Banks
1957

Melospiza melodia

20

24 April

E of Mar's Fac Club, Nest W.

0620. R-1 2.1 gm. Very quiet, apparently weak.
Other egg is still hatching - not yet in position
to be fed. Egg 1 stands on end - rotten.

Stream W of LSB -

Found nest 50" high in edge of clump of
bushes, 3 eggs. Same clump was
in, opposite end. Call it Nest V.
S. of Naval Research.

Found nest in briars by accidentally
flushing bird - incubating, probably 4 eggs.
Same area as Nest X was - evidently those
young did not survive. Call it Nest U.

E of Mar's Fac Club, Nest U

1830 L-1 1.7 gm. Down not dry.
R-1 3.2 gm. Head area shows dark, +
spots show along back. Cannot stay right-
side-up. Both birds gaped. L-1 very
weak.

25 April

0620 R-1 3.3 gm. or 3.2++. Humerus, back,
crown and whole head show dark from
feather buds beneath skin. Abdominal
tract shows, but only dark on anterior part.
L-1 1.7 gm. Very weak, down matted,
but dark feather streak showing on head.
Back + crown barely showing dark spots.

Stream W of LSB, Nest V

No change at 0715

S. Naval Research, Nest U

No change at 0715.

Banks
1957

Melospiza melodia

21

25 April

E Men Faculty Chh Nest U

4810

R-1 5.2 gm. Primaries bulging skin, also secondaries. 7, 8, 9 prim. maybe out - hard to tell. Ventral tract dark to division at least level.

L-1 2.8 gm. Hands only dark areas, but a few spots on mid-back.

26 April

R-1 5.1 gm. All primaries, only 1 secondary out of skin. Ant half of abd. tract, back, neck, humerus, + flank show very dark, spots on head are dark. Alula dark, not out. 8th prim. less than 1 mm.

L-1 2.9 gm. Hand area shows very dark. Back + crown show a few spots. Primary buds show. Down still matted, esp. in head region.

V of LSB, Nest V

No change. Birds not at nest yesterday or today. However, one bird was in the area today, A.M.

S. of Navel Research, Nest U

No change in A.M.

E Men's Faculty Chh, Nest U

1750. R-1 6.8 gm. All feather tracts show at least dark spots. Back, Upper Abdominal, + wing very dark. All primaries + secondaries thru skin, but inner secondaries just barely. 8th Primary 1 mm.

L-1 3.9 gm. Wing dark, back, neck, + upper abdominal show dark spots. 7, 8, 9 prim. maybe out, but if so barely discernable. Position head extended + down, resting on back.

Banks
1957

Melospiza melodia

22.

27 April

0625 E of Men's Fac Club, Nest W

R-1 6.7 gm. 8th Prim. 2 mm.

All primaries + secondaries well out. Cannot stay on belly, in proper position, because abdomen is too large. Some humeral, back, neck, + flank feathers out, and most on upper ventral tract.

L-1 3.9 + gm. All primaries out, but less than 1 mm. All tracts except lower abdominal show dark, but head has just few spots. No tracts really "thick" black, mostly many spots.

Stream S. of LSB, Nest V

No change. No adults around. Very likely deserted.

S. of Naval Research, Nest W

No change at 0700. ♀ not at nest.

E of Men's Faculty Club, Nest W

1755 L-1 5.5 gm. All primaries, all but ~~driving 2 or 3~~ secondaries thru skin, 8th prim. about 1 mm. All tracts show very dark now, except lower abdominal and thigh, the latter just a few black dots. Tail doesn't show.

R-1 9.1 gm.

Neck, back, flank, abdominal, humeral tracts thru skin. Alula, all prim. + sec. out. 8th prim. probably 4 mm. (no rule)

28 April

0650 R-1 8.9 gm. 8th Prim 5 mm.

All feather tracts, including crown (near) have most sheaths thru skin. Tried to crawl in my hand. Resting position with head extended, resting flat on hand.

Banks
1957

Melospiza melodia

23

28 April

E Meris Fae. Club, Nest W

L-1 5.8 gm. 8th Prim. 1.5 mm.

All primaries + secondaries out, but no other feathers. Eyes open a slit.

1855 L-1 7.5 gm. 8th Prim. 2.5 mm.

No change from this morning, except alula is out.

R-1 11.4 gm. 8th Prim. 7 mm.

All tracts show sheaths out of skin.

29 April

0655 R-1 11.35 gm. 8th prim. 9 mm.

Sheaths of rectrices thru skin. No feathers out of sheath. Holds head up.

L-1 7.6 gm. 8th Prim. 4 mm.

Sheaths on all tracts except head and tail are at least a little out of skin. Except thigh feathers not out.

1850 L-1 9.8 gm. 8th Prim 5 mm.

Thigh, crown, & tail sheaths still not out. Keeps head off my hand part time, if only slightly. Active in hand.

R-1 13.7 gm. 8th Prim 11 mm.

Many ventral feathers on both parts of tract, a few back, humeral, and 1 outer sec. covert on rt. wing are out.

Also a good no. of flank feathers out.

Rectrices sheaths to 2 mm.

Both birds crouched when I went to rest.

30 April

0715 L-1 9.1 gm. 8th Prim. 7 mm.

All tracts except tail have sheaths thru.

No feathers thru sheaths. Head rests on my hand.

Banks
1957

Melospiza melodia

24

30 April

E Men's Fac. Club, West W

R-1 12.4 gm. 8th Prim. 13 mm. ^{with}
Defecated before weighing. First time these
birds have defecated. Rt. 1, 3, 5, 6, 7, 8, left
2-8 primaries out of sheath. Many sec.
coverts + a few ($\frac{1}{2}$ +) secondary out.
Back, flank, + thighs have come out. One
out on crown. Rectrices out in sheath
3 mm, about to break thru. Tail coverts
out through. Holds head off hand but
drawn in.

1900 L-1 11.1 gm. 8th Prim. 9 mm.
All tracts have sheaths well out, but
no feathers thru yet. Upper tail covert
sheaths barely out, tail not.

R-1 4.9 gm. 8th Prim. 15 mm.
Rt. 9th, left 1st Primaries only ones not out.
3 + 4, rt., 4 + 5 left prim. covert only ones
out. Outer half of sec. coverts out.
No tail feathers out, a few on back of crown.
Back, humeral, abd., flank, thigh well
out. Tail 4 mm.
Both birds crouched at first, but both
japed later.

1 May

L-1 11.0 gm. 8th Prim. 11 mm.

AM Bird sits on balance pan with head raised.
Gave protest notes at nest. A few abdominal
feathers breaking thru sheaths. Sits on
entire tarsus.

R-1 14.2 gm. 8th Prim. 16 mm.

All prim + sec. out of sheath. Prim. coverts
out except Rt. 1, 2, 6, 8, Left 1, 2, 3, 8.
Back well feathered, as are most tracts.

Banks
1957

^M
Melospiza melodia

25,

1 May.

E. Men's Fec. Club

Still not many feathers out on head. Upper tail coverts + rectrices out of sheath. Tail

1850. P-1 16.2 gm. 8th Prim, 18 mm.
Gave several protest notes when lifted from nest. Grasped bottom of nest, as it did this morning. Got off balance pan + covered in corner of box. All primary coverts (great) out but rt. 8th + left 2nd. Head about half feathered, no stripe yet. All other tracts well feathered. 2 under tail coverts out. Tail (outer) 6 mm.

Throat + flanks show dark streaking.

L-1 13.7 gm. 8th Prim, 11 mm.

A few humeral feathers out - more on left than right. Most feathers on abdomen + upper flank, but not throat, are out. Tail outer feather 1½ mm. Outer secondary, right, is thru sheath - only wing feather.

R-1 gave the protest note + opened his gape, looking straight at me, when I lifted him from box. When I replaced L-1, he did the same - opened mouth toward me and ~~squawled~~ squawled. The note seems not to be one of protest, exactly - sounds a little different. Different also from begging + fight notes. May be, with the gaping, a threat display.

~~2 May~~

0652

Banks
1957

Melospiza melodia

26

2 May

E of Men's Fac. Club, West W

0653 R-1 14.9 gm. 8th Prim. 19 mm.

Very quiet on balance. Head stripe barely beginning to show up. Outer rectrix 8 mm. Under tail coverts out. Rt. 8th, left 1st.

greater prim coverts + anterior $\frac{1}{3}$ of crown seem to be only feathers not thru sheaths.

L-1 14.4 gm. 8th Prim. 14 mm.

New mt. after defecation 14.1 gm.

Left Prim. 2, 5, 6 are out, none on rt.

2 greater prim. cov. on rt. are out, none on left. Most humeral out.

A few back + thigh, Most on all ventral + flank. None out on head.

Outer rectrix 2 mm; no tail feath. out.

Both birds cling to nest bottom.

S of Manual Research Nest U?

No change at 0730.

~~1855~~ E of Men's Fac. Club - W.

1855 L-1 13.7 gm. 8th Prim. 15 mm.

Rt. greater prim. coverts 2 + 7 out, no rt.

primaries, ~~Rt.~~ ^{Left} prim. 2, 4, 5, 6, 7 out, no

greater coverts. All but one rt. secondary

+ all but inner 2-3 sec. coverts out, fewer

sec. + coverts on left. Head has no feathers

out, Mid-back well-feathered, upper +

lower back hardly. A few rectrices + upper

tail coverts starting thru. Outer tail

feather 3+ mm. Banded 24-180312 on

right leg. Sec. coverts mostly out on

right wing, fewer on left.

R-1 jumped from my hand + off scales

Could not work with him, so collected him.

see
p. 27

Banks
1957

Melospiza melodia

27.

2 May 57

S. of Naval Research, Nest U

R-1 2.2 gm. down dry.

R-3 2.0 gm. - down matted on head

L-3 2.0 gm. down dry

Found this nest had 3 young + 1 egg, possibly
pipped. Weighed them at 2000 hrs. Too
dark to make other observations. Balance
very un-level, weights maybe a couple
tenths of a gram off.

E. Meris Fac. Club, Nest U

R-1 collected this bird (see previous page.)

Wt. 16.2 gm. 8th Prim. 21.5 mm.

All wing feathers out, coverts almost
covering primary sheaths, more nearly
so on right wing than left. Very
slight ventral apteria. Most crown
feathers out, light stripe shows well.
Tail feathers all out, tail 9 mm.

Catalog no. 188.

3 May 1957

S. of Naval Research, Nest U

0645 R-3 2.0 gm. Head area slightly
darker. Very heavy, ^{thick} dark, down.

L-3 2.0 + gm. Down light sparse.

R-1 2.2 gm. Down thick, dark.

Still 1 unipped egg.

E. of Meris Fac Club, Nest U

0700 L-1 14.0 gm. 8th Prim. 16 mm.

Very little change from last night. More upper
back feathers out. Rt. Prim. 3, 5, 6, 7, left
prim. 2-7 are out, Rt. g.p.c. 2, 7, 8, ^{no} left
g.p.c. are out. Few head feathers out.

Banks
1957

Melospiza melodia

28

3 May,

W of Naval Research

A nest in a clump of *Rubus* was shown to me by Andrea Giovannini. It has 4 eggs. He found it 1 May, P.M. Call it T.
~~S. of Naval Research, Nest U~~

4 May

S. of Naval Research, Nest U

0655 L-3 3.2 gm.

R-1 3.3 gm.

R-3 3.1 gm.

L-1 2.5 gm. — squeaked while weighing.

L-1 is new bird, hatched since yesterday morning. Guess it will have to be unknown. It appears no different than others, is heavily downed. All birds have primaries showing as buds, dark spots on crown and back.

E. of Men's Fac. Club, Nest U

0640 L-1 in nest. Jumped from my hand repeatedly. Took him to take back to lab. (N42) Somehow he got out of my pocket, just as I was writing this, I saw him on ground, but he got away into *Rubus*. Could not find or get him.

S. of Naval Research, Nest U

1835 R-1 4.9+ gm.

L-3 5.0 gm.

R-3 4.8 gm.

L-1 3.2 gm.

On all but L-1, primaries just ready to break thru skin.

Two change

2000

5 May

S of Naval Research, Nest U

0640 L-3 5.1 gm. Primaries + secondaries show as buds, not quite out of skin. Crown well spotted beneath skin. Back, neck, humerus, wing, + flank very dark, also upper abdominal tract. Thigh spotted. Eyes not open.

L-1 3.1 gm. Seems much smaller. Very much same as L-3, but no marks on thigh, fewer on crown. Squeaks in my hand.

R-1 5.3 gm. Primaries are out a little, otherwise same as L-3 but whole aspect darker, down much thicker.

R-3 4.7 gm. Same as L-3.

W of Naval Research, Nest T

No change out 0700.

S of Naval Research, Nest G

1900 R-1 7.2 gm. 8th Prim. 1 mm.

Primaries + secondaries are only feather sheaths thru skin. All areas very dark. Faint squeaking. Very active on balance.

R-3 6.7 gm. 8th Prim. 1 mm.

Same as R-1

L-1 4.3 gm. 8th Prim. < 1 mm.

Inner secondaries not quite out.

Squeaked + gaped.

L-3 7.1 gm. 8th Prim. 1 mm.

Same as R-1 + R-3, less dark on ant. ventral tract. Post. ventral tract not dark on any. Much less down. All birds gaped as soon as I touched nest.

6 May

S. of Naval Research, Nest U

- 0705 L-3 6.8 gm. 8th Prim, 2 mm.
Held self erect in hand, pretty well.
Sec. coverts, neck, humerus have many
sheaths but not far. A few on back.
R-1 6.5 gm. 8th Prim, 2+ mm.
Same as above.
R-3 6.5 gm. 8th Prim, 2 mm.
Same as above.
L-1 4.4+ gm. 8th Prim, 1 mm.
Flank tract not very dark, few spots
on thigh. Prim. & sec. only are out,
and alula.

S. of Naval Research Nest T

- 0720 3 young and 1 pipped egg.
R-1 2.0 gm.
L-1 1.9 gm
L-3 1.9 gm } dark streaks on hand.
Cannot hold self up,
assume egg position
after a short gape.

- 1855
0655 R-3 1.8 gm.
R-1 3.0+ gm.
L-3 2.8 gm.
L-1 3.0 gm.

All showed dark hand area, rows of
dark spots from crown to tail.

S. of Naval Research, Nest U

- 1910 R-1 8.7 gm. 8th Prim, 3.5 mm.
Eyes open. Sheaths out on all tracts but
thigh, tail, & crown, but nearly on first & last.
Gaped in hand. & gave high pitched squeak,
rather buzzy, very fast notes.
R-3 8.5 gm. 8th Prim, 3.0 mm.
Very active, squashed a lot. Few sheaths

6 May,

S. of Naval Research, Nest U

out on flank, and on post abdominal. ^{eyes} open.
 L-3 9.7 gms, 8th Prim, 3 mm.

Some sheaths from all tracts out, not many
 on thigh + lower back, or flank. ^{base of} ~~attached~~

L-1 5.9 gms, 8th Prim, 2 mm.

Laid on back could not right self. Prim, + sec.
 all out. Some humeral + a few mid-back
 sheaths out. No others.

All birds laid quietly if I waved my
 hand over the nest, but as soon as I
 jostled it by touching it, all popped up
 like jack-in-the-boxes, with mouths wide
 open.

7 May,

0700 R-3 ~~8.1~~ 8.1 + gm, 8th Prim, 5 mm.

Eyes open. Some sheaths out on all tracts
 but thigh.

L-1 5.6 gm, 8th Prim, 3 mm.

No thigh, flank, or crown sheaths out.
 Eyes not open.

L-3 8.9 gm 8th Prim, 5 mm.

Same as R-3, Eyes not open.

R-1 8.3 gm, 8th Prim, 5 mm.

Eyes open. A few thigh sheaths out,
 otherwise like R-3.

U. of Naval Research, Nest T

0718 A.G. reports yesterday at 1430 still 1 egg.

L-3 3.1 gm. Humerus + back show
 dark spots, ant. ventral tract ~~to~~ shows dark.

L-1 3.0 - gm, Same as L-3

R-1 3.2 gm.

R-3 1.8 gm. Same, dark areas not as
~~dark~~ dark as on others.

Banks
1957

Melospiza melodia

32.

7 May.

Stream W/ LSTB

In same territory as Y and V, A. Giovannini has found 2 more nests - one deserted with 4 eggs, and one empty, on which the ♀ was when he showed me. He saw the bird building. Call the ~~second one~~ first one S, the second R.

W/ Naval Research, Nest I

1845 R-1 4.3 gm.

R-3 2.8+ gm.

On R-1, outer 4 Prim. showing spines, ant. ventral tract dark, a few light spots on thigh. R-3, here no shows a few spots, dark on head, spots on head & back only.

L-1 4.1 gm

L-3 4.7+ gm

} both same as R-1

S/ Naval Research, Nest II

1855 L-3 12.5 gm. 8th Prim. 7 mm.

Very active on nest. Eyes open. Some posterior ventral feathers about to break sheaths. Most all sheaths out of skin on all tracts.

R-3 11.7 gm. 8th Prim. 6 mm.

Same as L-3. Eyes open

L-1 7.6 gm. 8th Prim. 3.5 mm

No thigh sheaths out, nor crown sheaths except very near (occipital). No feathers show signs of coming thru. Eyes open.

R-1 11.6+ gm. 8th Prim. 7 mm.

A few vent. post. feathers actually barely out. Otherwise same as L-3, R-3. Eyes open.

8 May

S of Naval Research, Nest U

1840 Nest is empty, Nest is dry inside, not disturbed.

9 May

W of Naval Research, Nest T.1845 L-1 8.2 gm. 8th Prim. 2 mm.

Alula, all prim + sec. out. Humeral sheaths also out. Upper + mid-back + upper abdominal + a few flank sheaths out. Eyes not open.

L-3 9.1 gm. 8th Prim. 2+ mm.

Same as L-1. Inner prim cov. + outer sec cov out. Did not notice this on L-1. 4 gpc (inner) are out, all g.s.c. Eyes closed

R-1 9.6 gm. 8th Prim. 3 mm.

All gpc sheaths are out. Eyes slightly open.

R-3 6.2 gm. 8th Prim. - mm.

Eyes closed. All prim. barely out all sec. barely out. Alula out. No others out.

10 May

0650

R-1 9.3 gm. 8th Prim. 5 mm.

Wing, humeral, back (all parts), flank, whole ventral, + head sheaths out. A few just out on thigh. Eyes open.

L-1 8.4 gm. 8th Prim. 4 mm.Same as R-1 but no sheaths out on thighs.L-3 9.0 gm. 8th Prim. 4 mm.

Same as R-1. Eyes may not be open.

R-3 5.9+ gm. 8th Prim. 1 mm.

Eyes slightly open. Prim + sec out, no covts. Upper ventral sheaths out, but just. No other out.

Banks
(1957)

Melospiza melodia

34,

10 May 1957

Stream S of L5B, Nest R

A.G. reports 1 egg yesterday, 2 this morning.
S. of Naval Research, Nest U

A.G. reports a Stellar Jay. around nest during the day of May 8. At 1530 ±, there were 3 young, jay was nearby. Was chased once by parents, but returned. It was absent when he left. When I was there at 1840, nest was empty. Smallest one was gone first.

Fourth egg hatched 3 May acc. to A.G.

W of Naval Research, Nest T

A.G. saw the nest destroyed by a Stellar Jay (i.e. young taken) about 1330 hrs. He salvaged one of the young, R-1, which he kept and fed all afternoon and gave to me at 1600. Preserved it as 194.

11 May

No nests to check.

14 May

Stream W of L5B, Nest R.

A.G. reports only one egg here today

15 May

Today this nest was found completely destroyed.

22 May

S. of Naval Research

As I walked past the area of Nest U, a bird began chipping alarmedly. Finally it settled down in bush along top of bank. I flushed the bird from the inside of the two big trees. Did not find nest - yet.

Banks
1957

Melospiza melodia

35.

22 May 1957

Stream W. of LSB

Found nest with 34 eggs. Call at Q(s)
Same territory as R, S, V, X.

23 May 1957

S. of Naval Research

Tho I looked in the area where I saw & flushed the bird yesterday, I could find no nest. Today, not even any adult birds around.

24 May

Stream W. of LSB, Nest Q(s)

Flushed bird from nest. Still 3 eggs.

25 May.

No change at 0625. Eggs in same position.

31 May

No change today at 1715.

1 June.

At 0800, one young and 2 eggs. The young is not dry yet - all the down is matted. However, a series of slightly dark spots is evident along back.

Marked this bird R-1.

1920 R-1 2.4 gm. Lies on side.

Spots evident on crown & length of back. (Band) dark streak. Humerus spotted. Ventral tract looks like row of transparent stitches.

R-3 2.3 gm. Same as R-1.
Still (egg).

● ●

Banks
1957

Melospiza melodia

36.

2 June 1957

Stream W of SB, Nest Q(1)

- 0635 R-3 2.3+ gm. Down patches are on crown, mid-+lower back, humerus, hand, + flank. No difference from last mite
- R-1 2.3 gm. ~~Throat~~ ~~area~~ of ventral tract shows dark spotting. Similar on R-3, but very slight.
- 1930 R-1 3.9 gm. Dark area of ventral pterygia expanding to rear. Nothing on leading edge.
- R-3 3.8 gm. Very little dark on Throat.

3 June

- 0640 R-3 3.9-gm. A few dark spots on flank + thigh.
- R-1 4.1 gm. As above.
- L-3 1.6-gm. New!
- Covered w/ pure white down, whereas in the others, both this + other nests, it is grey. Down very heavy + short. On crown, entire back, humerus + hand, flank, V shaped patch on top of head, apex toward front, also some on occipital part.

- 1940 R-3 6.3 Flank shows dark spots. Other feather areas, except thigh, darker than they were.
- R-1 6.2+ As above
- L-3 2.1 all white. No feather tracts show.

4 June

Steam W. of L.S. Nest Q (s)

0635 R-3 5.9 gm. All prim. & all but inner 3 sec. well out. Gsc. nearly thru, gsc starting. Ventral darkening now in inverted U, from throat down lateral $\frac{1}{3}$ of ventral tract to rib level. (i.e., upper ventral tract).

R-1 6.1 gm. same as R-3

L-3 2.0 gm. No change.

1920 R-1 7.7 gm. 8th Prim. 7.1 mm

All primaries, gsc., sec., 3 outer gsc. are thru skin. Alula thru. Some humeral slightly out. Others, on mid-back & flank, ready to pop.

R-3 7.7 gm. 8th Prim. 7.1 mm.

Same in all respects as R-1. Eyes may be beginning to open.

No sign of little R-3, the white bird.

5 June

0635 R-1 7.7 gm. 8th Prim. 2.5 mm.
Sheaths out on mid-back & neck. All gsc. out.

Some humeral, many upper abdominal & sheaths out. Eyes open a slit.

R-3 7.9 gm. 8th Prim. 2.5 mm.

Same as above.

1930 R-3 10.6 gm. 8th Prim. 4 mm.

A few crown sheaths out, some all along back. Flank & thigh as well as some on all parts of ventral tract are out.

R-1 9.9 gm. 8th Prim. 3.5 mm.

Not as far as R-3 - fewer sheaths out on flank & thigh.

Banks
1957

Melospiza melodia

38

6 June

Stream W. of 15B, Nest Q(5)

0635 R-3 (10.0 gm. 8th Prim. 5.5 mm.

Most sheaths out, except anterior crown. Skin of head has turned very dark - not sure when, probably gradually. Leading edge sheaths not out, except for posterior row. Eyes open, but not held open for long at a time. Gaped.

R-1 10.4 gm. 8th Prim. 5 mm.

Much as R-3, but not all thigh sheaths out, fewer out on leading edge.

Cyanocitta in area as I left nest.

1930

R-3 (13.3 gm. 8th Prim. 7 mm.

Rectrices starting out. Upper tail coverts almost. Most sheaths out except those on leading edge (posterior row is out) and anterior most on head. 3 rows of feathers show between ventral tracts - these far apart, still deep under skin.

R-1 12.9 gm. 8th Prim. 7 mm.

Almost same - upper tail coverts out farther, rectrices less. New ventral feathers don't show. Head + wing maybe slightly farther.

7 June

0745 R-1 ~~13.3~~ 13.3 gm. 8th Prim. 8.5

Ventral + lateral abdominal feathers, many flank + a few mid-back feathers out. Rectrices + upper tail covert sheaths out, lower almost out.

Vt. after defecation 13.1 gm.

R-3 13.4 gm. 8th Prim. 8+ mm

Collected ~~See next page.~~ # 204,

Banks
1957

Melospiza melodia

39.

Call

7 June 1957

Stream W of L.S.B., Nest Q(5)

Collected the remaining young R-1, at
1900. Wt. 14.7 gm. 8⁴⁴ min, 10.5 mm.
~~Catalog~~ # 205 6½ days.

17 June 1957

U.C. Campus, Berkeley, Alameda Co., Calif.

Found no nest today, think my
season's work is done. Saw both members
of a pair along the stream W. of
L.S.B., area of Nest Q(5). May be a nest
here. If so it will be their sixth.

R. C. Banks
Species Accounts
1956-1957
Mammals

Banks
1956

Citellus beecheyi

28 May 2.3 mi below summit Mt. Diablo 2650±ft. Contra Costa Co., Calif.
♀ 425-145-50-28 well over 200 gm. Nipples large.
Hard to find uterms, placental scars. Skull crushed.
DOR., head run over by car. Very fat, stomach full.



Banks
1956

Neotoma fuscipes

21 May 1956 Alameda Co (?) Calif.

88 ♀ 457-235-45-31 Kept caged by M. Marsh.

207 gm. Date of capture unknown.

7 July 1956 Black Hills, 2.6 mi N Orinda Village 10201 Contra Costa Co, Calif.

♂ 104 Caught in rat trap, walnut bait.

182.3 gm, 378-183-42-28. A very old

house not too far away, and a huge one
a hundred yards away were only rat signs.
Very dry, no water for at least a mile.

S. side of hill, S. facing slope. Many
parasite eggs in intestine with formed pellets.

14 July ♀ 110, ♀ 111 Close together by group of
houses, S. side of hill. No embryos in either.

15 July ♂ 119 by 110 + 111 (same trap as one of
those). This area is tall Baccharis and
Artemisia, not too far from edge of woods,
lower hill. Different from area on top
of hill. ♀ imm 118 on opposite side
of hill (N.) nowhere near any houses I
have seen. May have been moving, or
just wandering.

Banks
1957

Peromyscus Californicus

23 June Black Hills, 2.6 mi N Orinda Village, Contra Costa Co.,
Calif., 10202 ft

1 juv ♂, , 227-109-25-27

1 subadult ♀, 213-111-26-24

Traps baited with walnut. Both
caught on North facing slope, north side
of hill, under

8 July ♀ no embryos alive in trap, caught by
tail. Had chewed string, and was about
10 ft from where the trap was originally.
S. side of hill, mus. sp., walnut. Under

14 July ♀ 114, slipping badly, made flat skin + skull.
A ♂ 42.8 gm, 239-122-26-26, thrown away.

Banks
1956

Peromyscus truei

24 June Black Hills 2.6 mi N Orinda Village, 10 mi E Contra Costa Co, Calif.

♂ 96 Under Artemisia, W. side of hill. Walnut
bait, in mus. sp.

♀ 97 In same trap as *P. californicus* # 92., under
N. Side of hill.

8 July ♂ 106 NE side of hill, mus. sp., walnut.
under _____

14 July ♂ 112 ♀ 113 under _____

♀ 115 flat skin + skull, also under same plant.

115 had 5 large embryos, saved in alcohol.

Banks
1956

Peromyscus maniculatus

Pt. Reyes, Marin Co., Calif.

30 Sept, 1956 Caught 10, put up 3, all ♀, no emb.

124 ♀ 155-73-21-16 no emb.

125 ♀ 162-76-21-16 no emb.

126 ♀ 163-72-20-18 no emb.

♀ 174-80-21-17 " "

♀ 149-67-19-16 " "

♀ 185-93-21-19 " "

♂ 161-68-19-17 tail broken + chemoed.

♂ 147-58-20-18 end of tail gone

♂ 155-71-20-17

♂ 161-76-20-17 tail broken + chemoed.

These were caught overnight in coastal scrub, mostly Lupinus, a few in some tall heavy grass adjoining. Traps were generally under ~~large~~ lupine bushes or clumps of grass. Walnut bait.

Whe
1957.

Peromyscus sp.

2.1 mi WNW Starkeville (Post Office) 1180±ft., Jefferson Co., Ohio
Dec. 21, 1957

In a field area caught 2 Peromyscus. They were ♂+♀, near each other, possibly a pair. They were in a patch of briars and tall weeds at the edge of the field. Skins #261, 262.

Dec. 23, 1957

Same area, 1150±ft.

Traps set in woods here, near fallen logs and tree stumps, what look like good mouse areas. Had one Peromyscus near a broken fallen Beech, Skin #264. Another in a trap in the hollow base of a Beech, several yards away and up the slope. Skin #265.

30 Dec.

Caught another Peromyscus in the area of 264, around the same fallen Beech. This is #269.

31 Dec.

Got a Peromyscus in a standing hollow tree. This one is #270.

